JP2002-230426

Fig.1

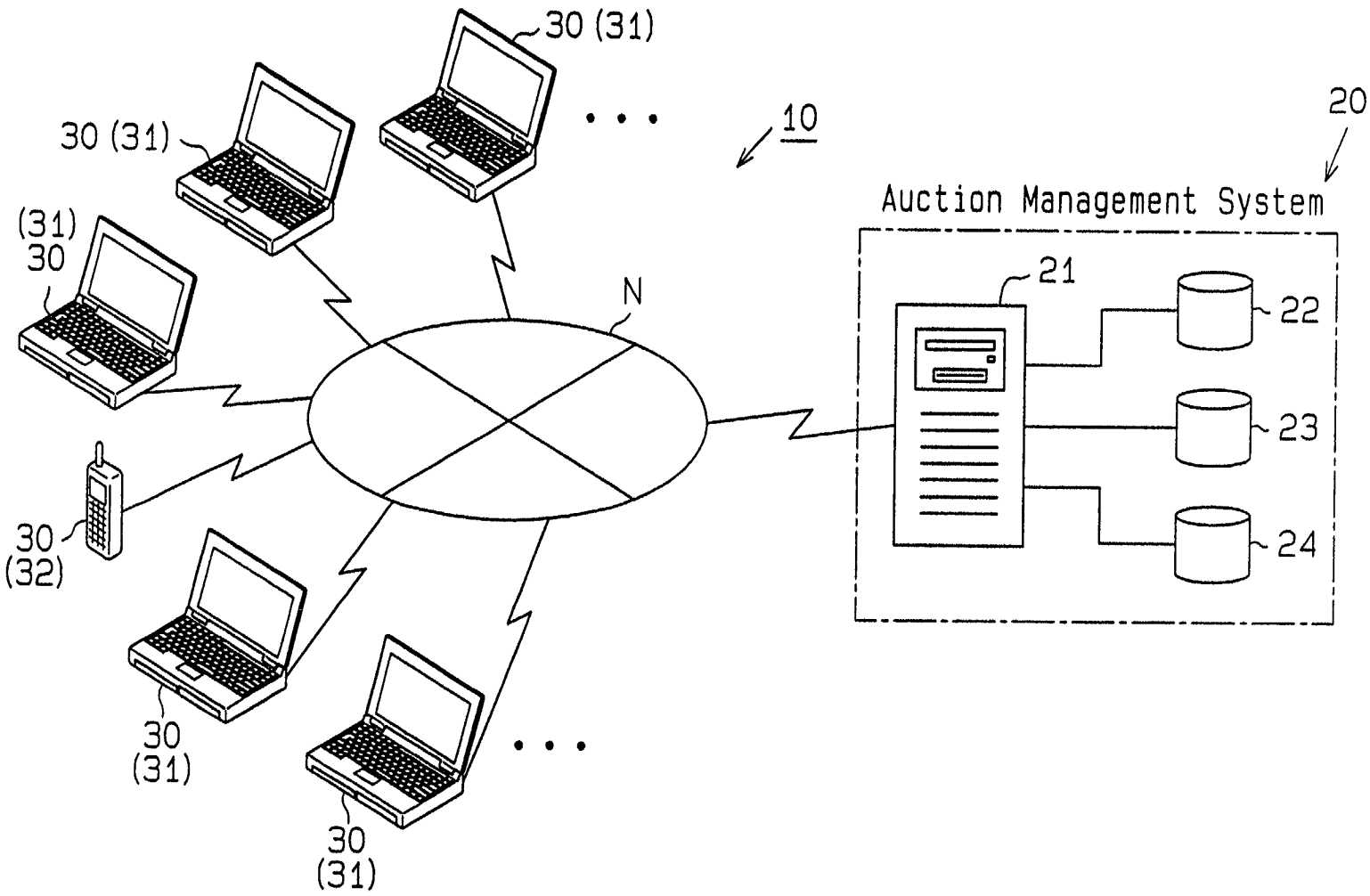


Fig.2

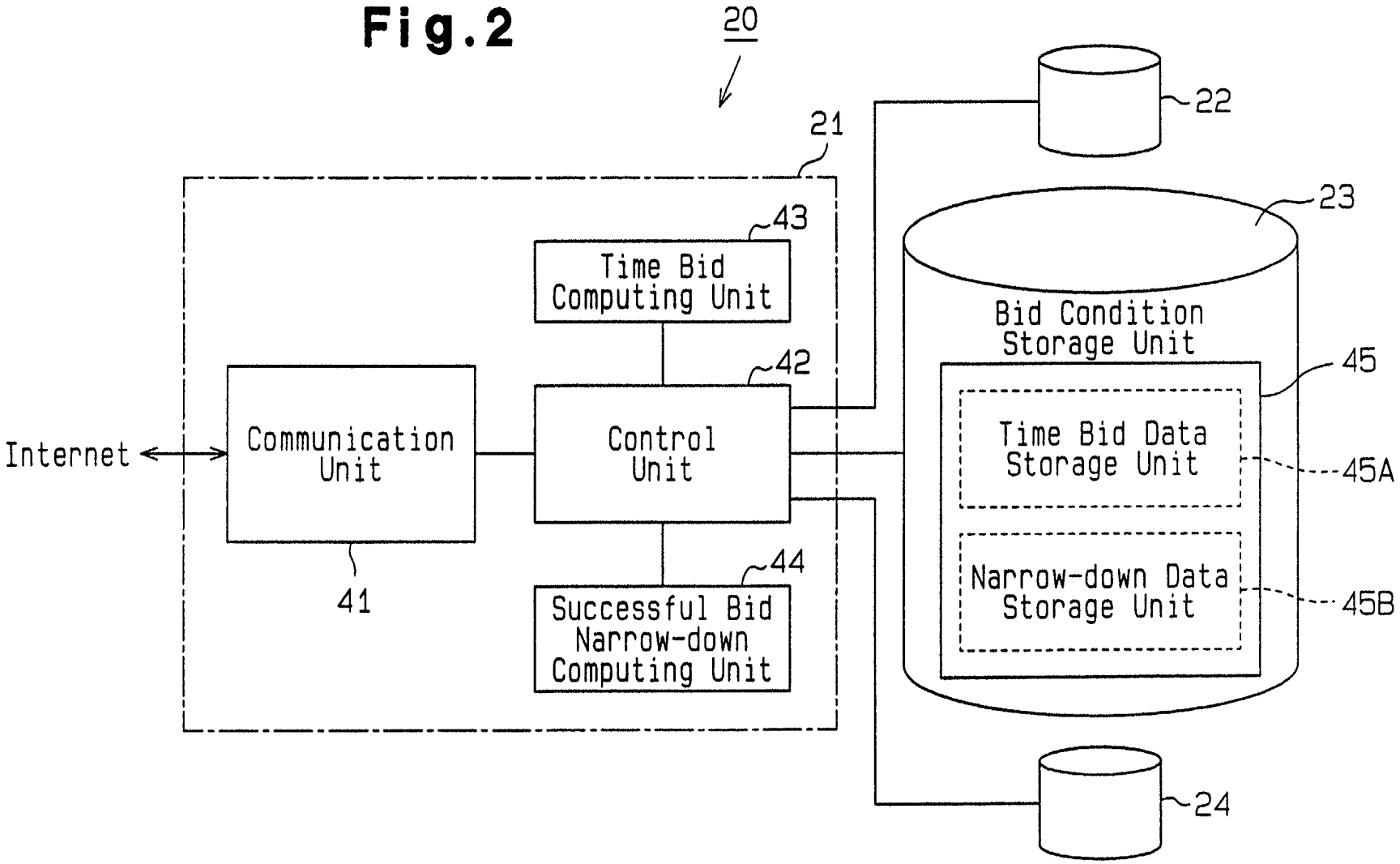

20
21
22
23
43
Time Bid
Computing Unit
Bid Condition
Storage Unit
42
45
Internet
Communication
Unit
Control
Unit
Time Bid Data
Storage Unit
45A
Narrow-down Data
Storage Unit
45B
41
44
Successful Bid
Narrow-down
Computing Unit
24

Fig.3

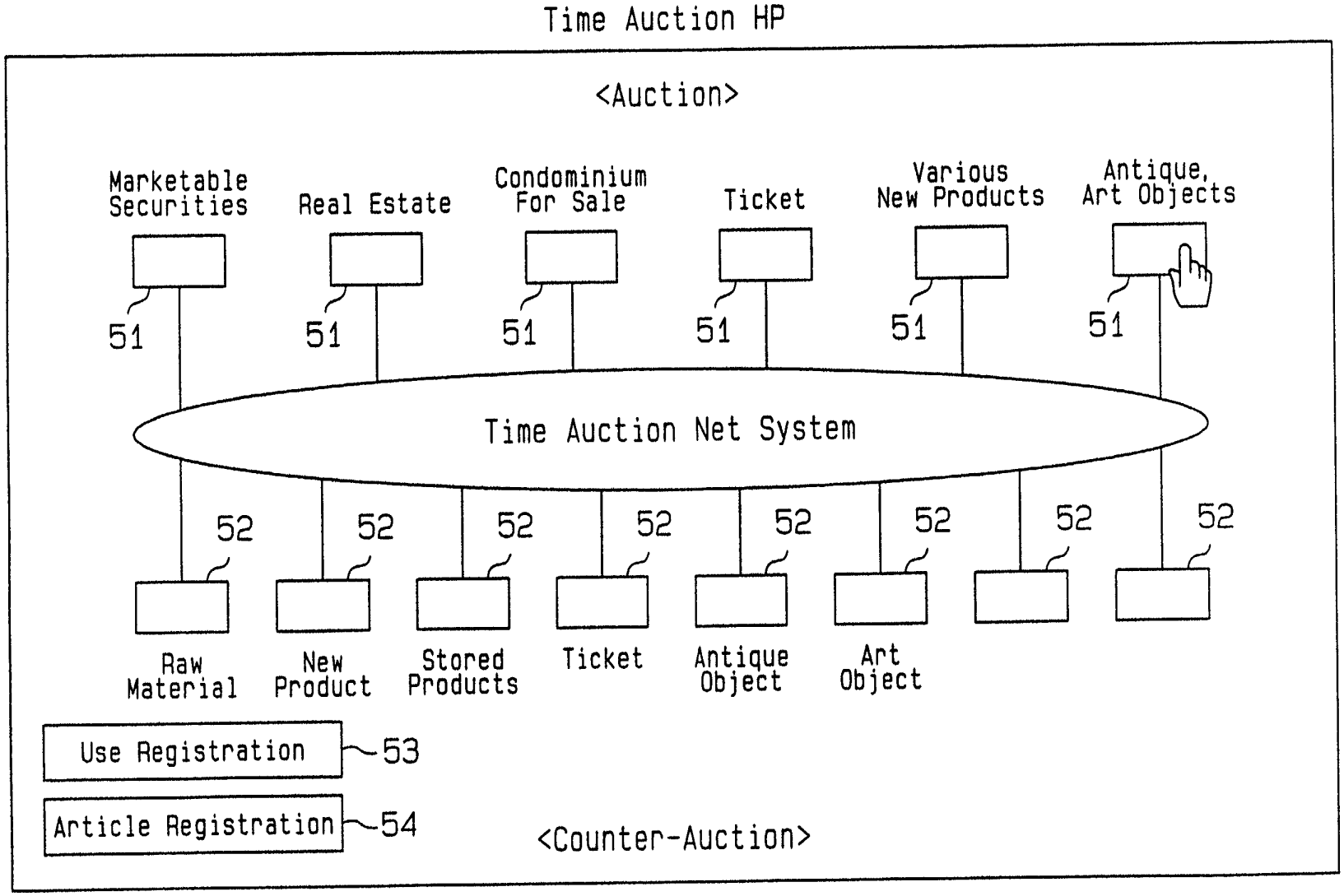

Time Auction HP
<Auction>
Marketable Securities
Real Estate
Condominium For Sale
Ticket
Various New Products
Antique, Art Objects
51
Time Auction Net System
52
Raw Material
New Product
Stored Products
Ticket
Antique Object
Art Object
Use Registration
53
Article Registration
54
<Counter-Auction>

Fig.4

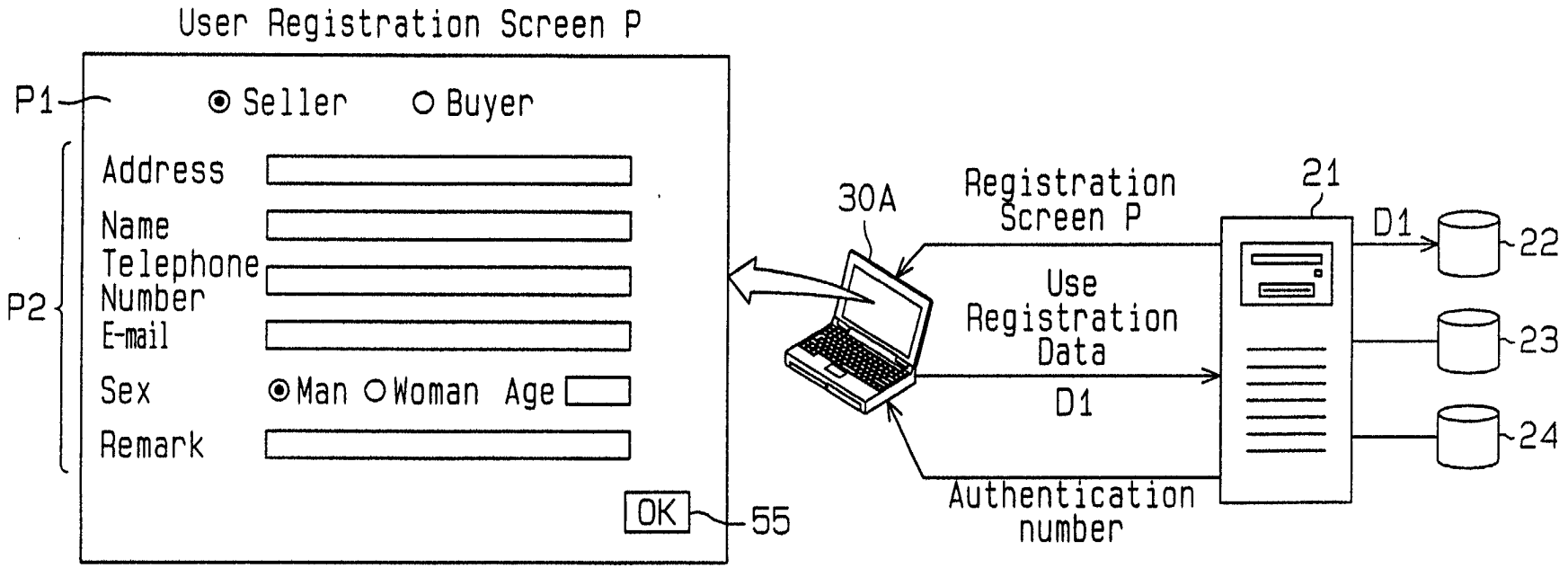

User Registration Screen P
P1
Seller
Buyer
P2
Address
Name
Telephone Number
E-mail
Sex
Man
Woman
Age
Remark
OK
55
30A
Registration Screen P
Use Registration Data
D1
Authentication number
21
D1
22
23
24

Fig.5

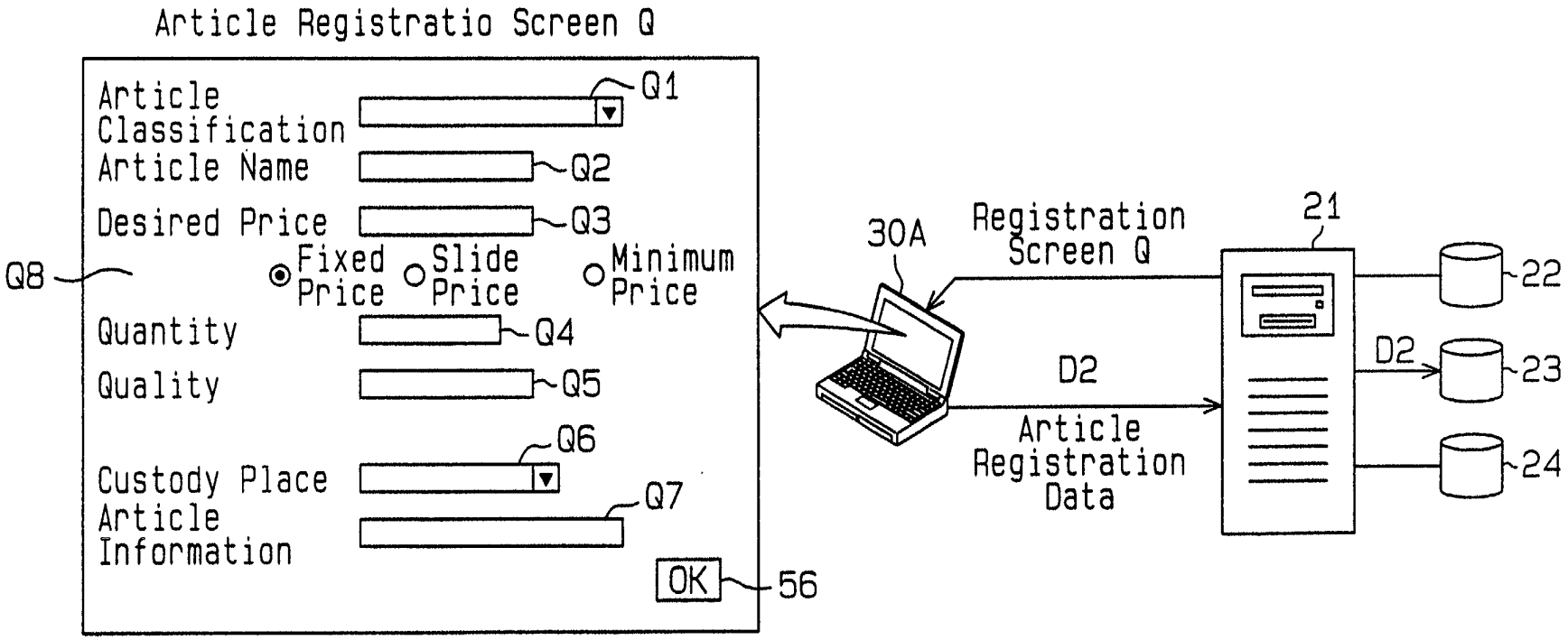

Article Registratio Screen Q
Article Classification
Q1
Article Name
Q2
Desired Price
Q3
Q8
Fixed Price
Slide Price
Minimum Price
Quantity
Q4
Quality
Q5
Q6
Custody Place
Q7
Article Information
OK
56
30A
Registration Screen Q
21
22
D2
23
D2
Article Registration Data
24

Fig.6

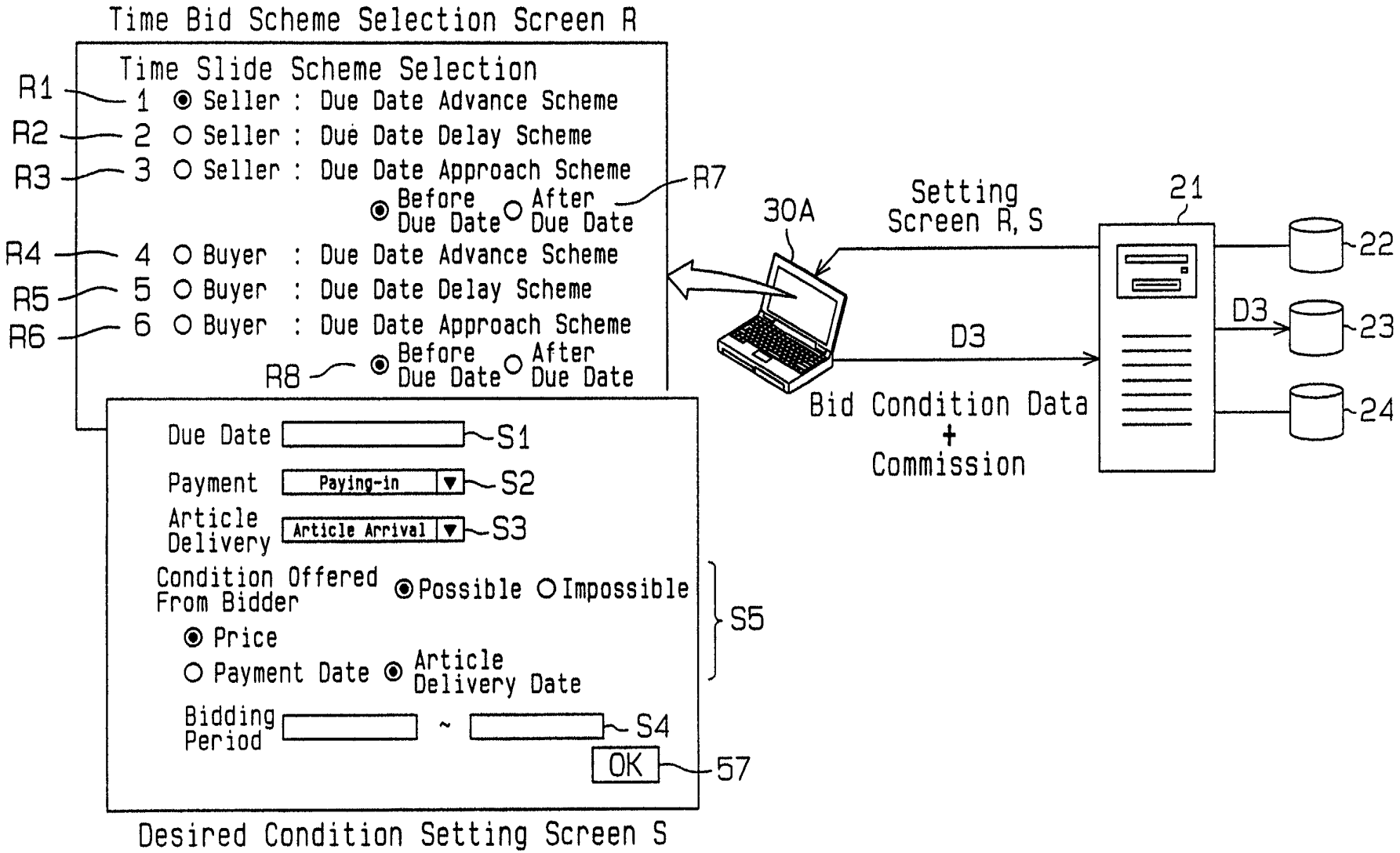

Time Bid Scheme Selection Screen R
Time Slide Scheme Selection
R1
1 Seller : Due Date Advance Scheme
R2
2 Seller : Due Date Delay Scheme
R3
3 Seller : Due Date Approach Scheme
R7
Before Due Date
After Due Date
R4
4 Buyer : Due Date Advance Scheme
R5
5 Buyer : Due Date Delay Scheme
R6
6 Buyer : Due Date Approach Scheme
R8
Before Due Date
After Due Date
Due Date
S1
Payment
Paying-in
S2
Article Delivery
Article Arrival
S3
Condition Offered From Bidder
Possible
Impossible
Price
Payment Date
Article Delivery Date
S5
Bidding Period
S4
OK
57
Desired Condition Setting Screen S
30A
Setting Screen R, S
21
22
D3
23
24
D3
Bid Condition Data
+
Commission

Fig.7(a)

Due Date Advance Scheme

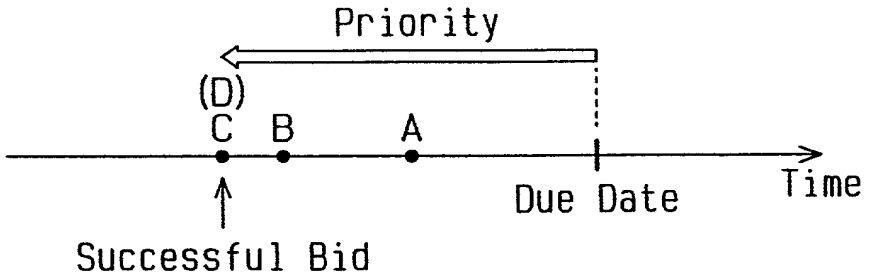


Fig.7(b)

Due Date Delay Scheme

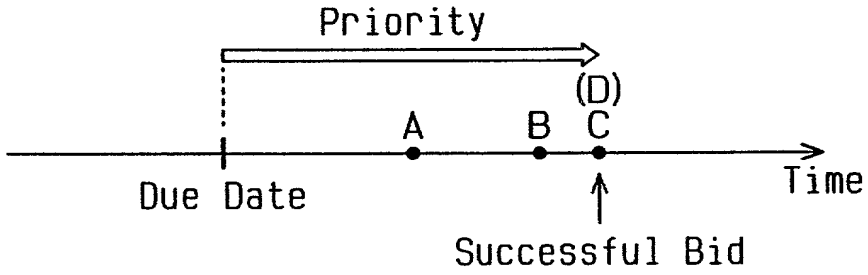


Fig.7(c)

Closest Pre-Due Date Scheme

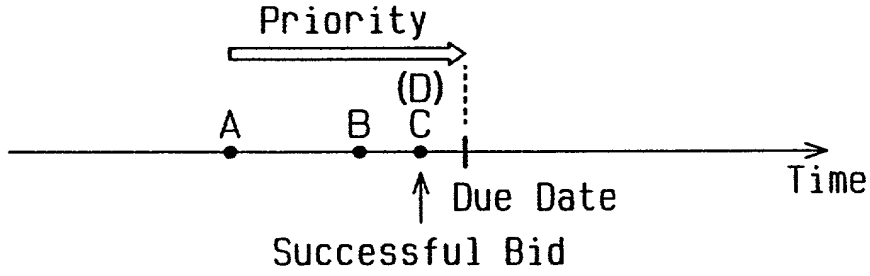


Fig.7(d)

Closest Post-Due Date Scheme

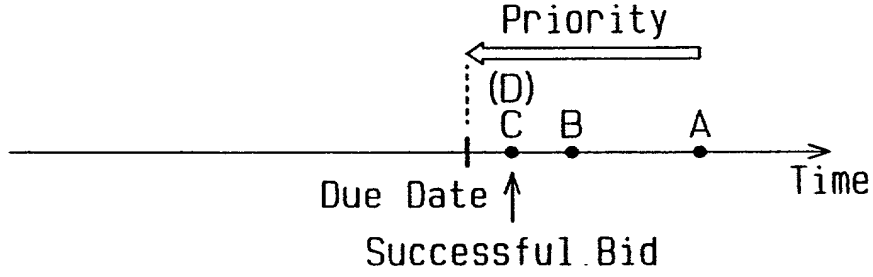


Fig.8

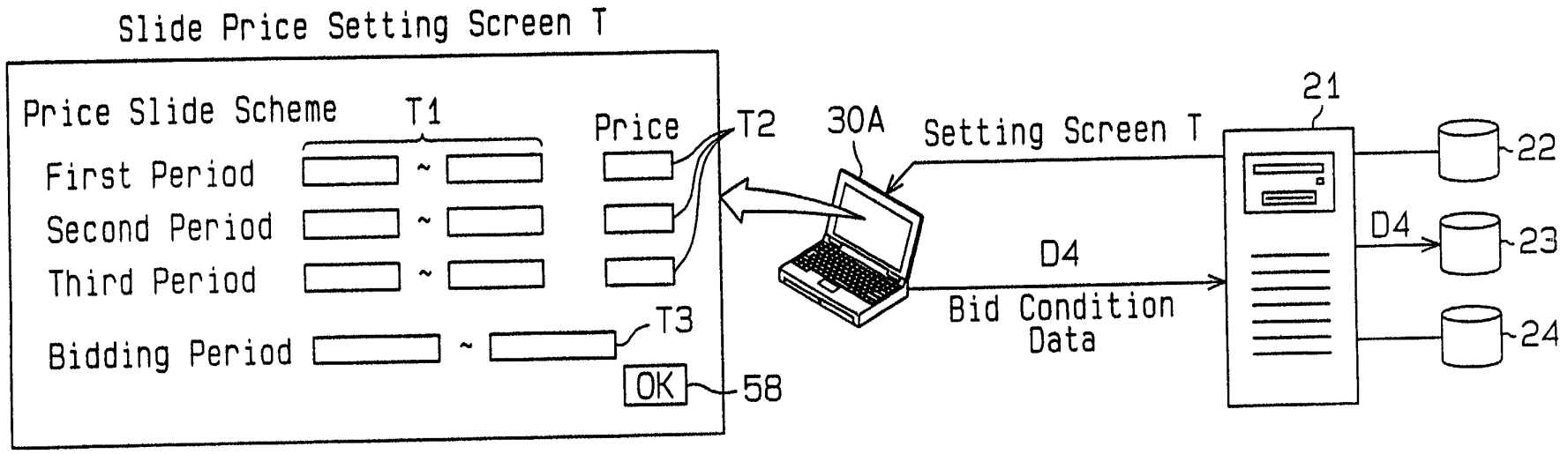

Slide Price Setting Screen T
Price Slide Scheme
T1
Price
T2
First Period
Second Period
Third Period
Bidding Period
T3
OK
58
30A
Setting Screen T
21
D4
Bid Condition Data
22
D4
23
24

Fig.9

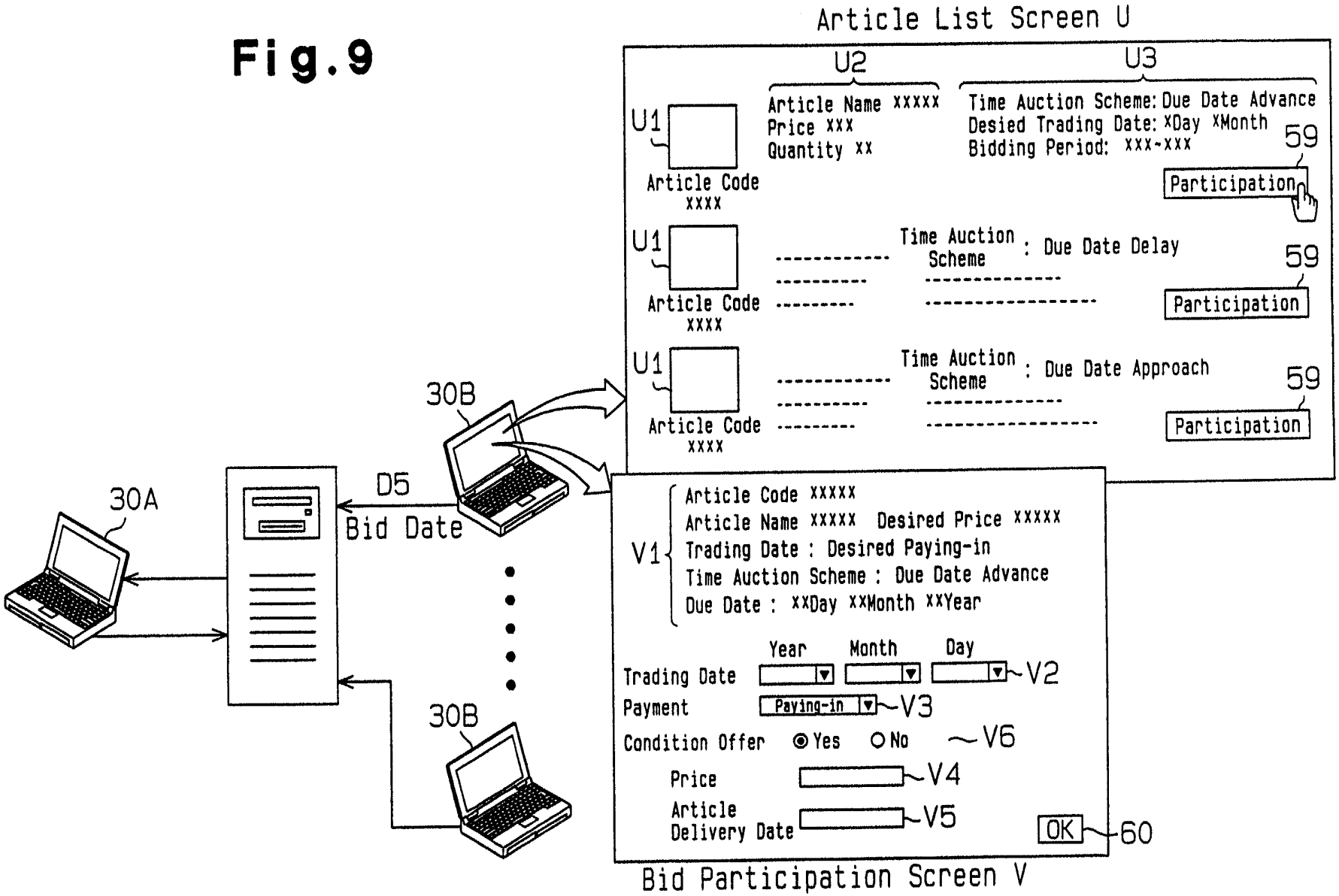

Article List Screen U
U2
U3
U1
Article Name xxxxx
Price xxx
Quantity xx
Time Auction Scheme: Due Date Advance
Desied Trading Date: xDay xMonth
Bidding Period: xxx~xxx
59
Participation
Article Code
xxxx
Time Auction Scheme : Due Date Delay
Time Auction Scheme : Due Date Approach
30A
30B
D5
Bid Date
V1
Article Code xxxxx
Article Name xxxxx Desired Price xxxxx
Trading Date : Desired Paying-in
Time Auction Scheme : Due Date Advance
Due Date : xxDay xxMonth xxYear
Year
Month
Day
Trading Date
V2
Payment
Paying-in
V3
Condition Offer
Yes
No
V6
Price
V4
Article Delivery Date
V5
OK
60
Bid Participation Screen V

Fig.10

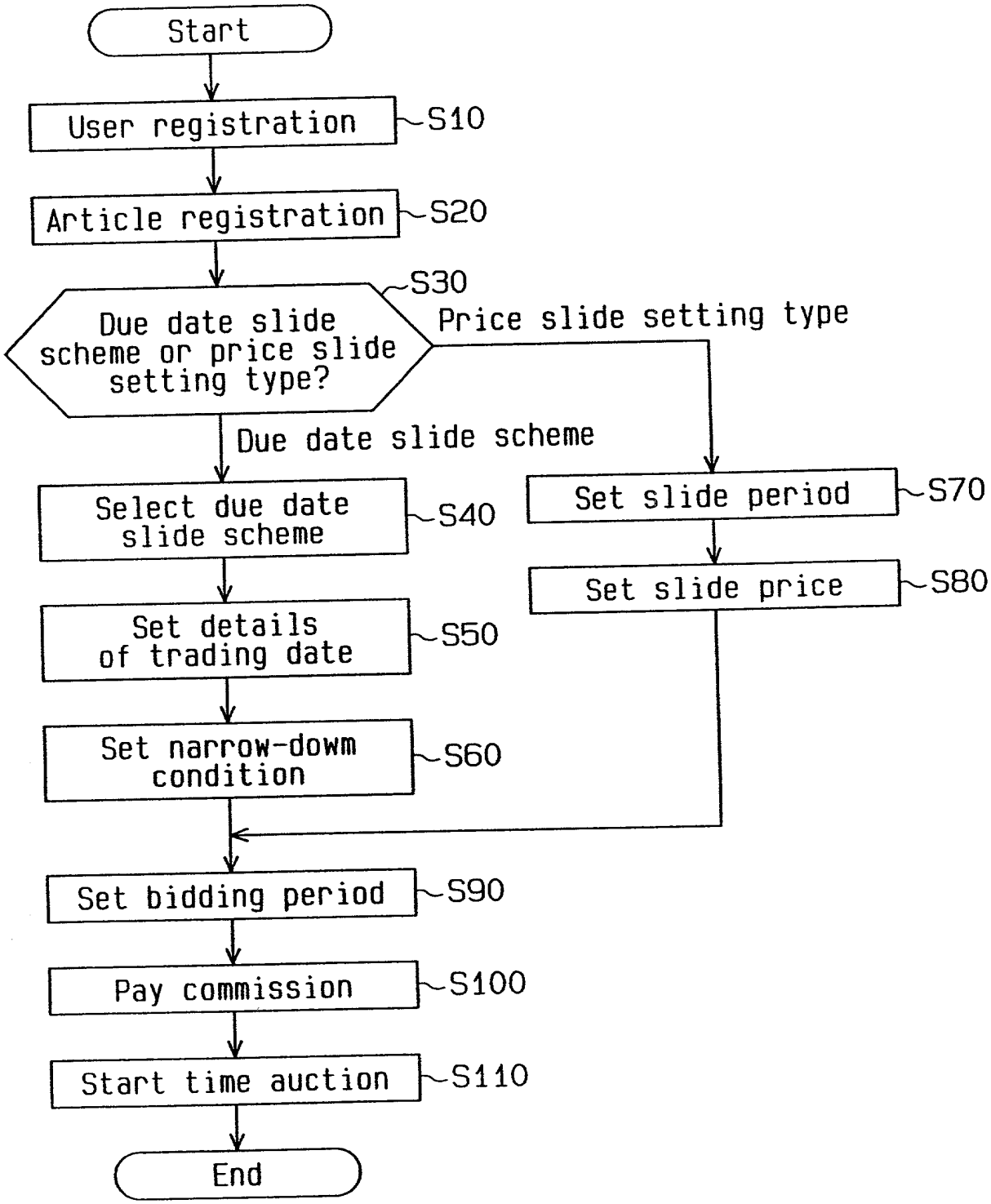

Start
User registration
S10
Article registration
S20
S30
Due date slide scheme or price slide setting type?
Price slide setting type
Due date slide scheme
Select due date slide scheme
S40
Set details of trading date
S50
Set narrow-dowm condition
S60
Set slide period
S70
Set slide price
S80
Set bidding period
S90
Pay commission
S100
Start time auction
S110
End

Fig.11

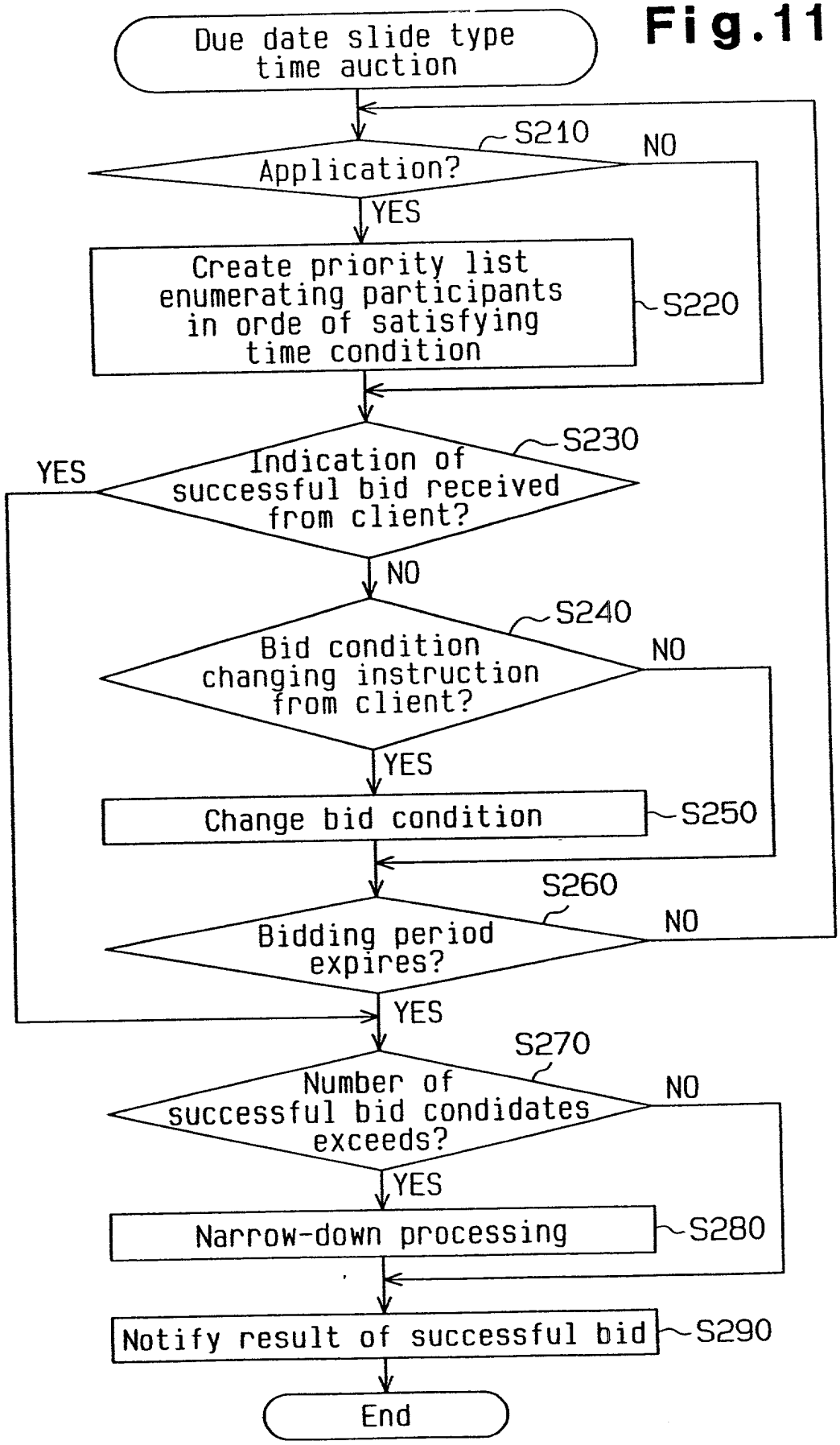

Due date slide type time auction
S210
Application?
NO
YES
Create priority list enumerating participants in orde of satisfying time condition
S220
S230
Indication of successful bid received from client?
YES
NO
S240
Bid condition changing instruction from client?
NO
YES
Change bid condition
S250
S260
Bidding period expires?
NO
YES
S270
Number of successful bid condidates exceeds?
NO
YES
Narrow-down processing
S280
Notify result of successful bid
S290
End

Fig.12

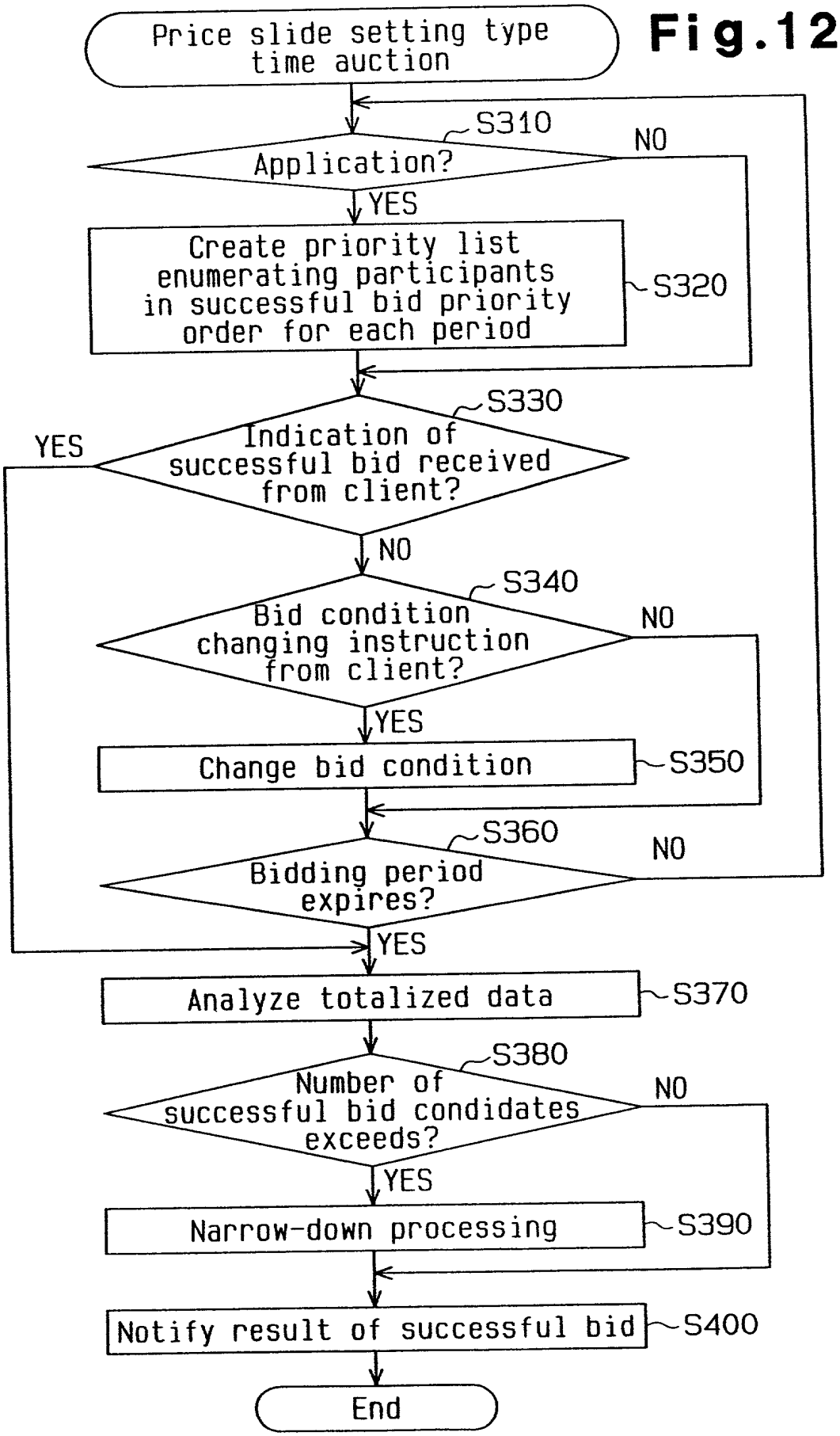

Price slide setting type time auction
S310
Application?
NO
YES
Create priority list enumerating participants in successful bid priority order for each period
S320
S330
Indication of successful bid received from client?
YES
NO
S340
Bid condition changing instruction from client?
NO
YES
Change bid condition
S350
S360
Bidding period expires?
NO
YES
Analyze totalized data
S370
S380
Number of successful bid condidates exceeds?
NO
YES
Narrow-down processing
S390
Notify result of successful bid
S400
End

Fig.13

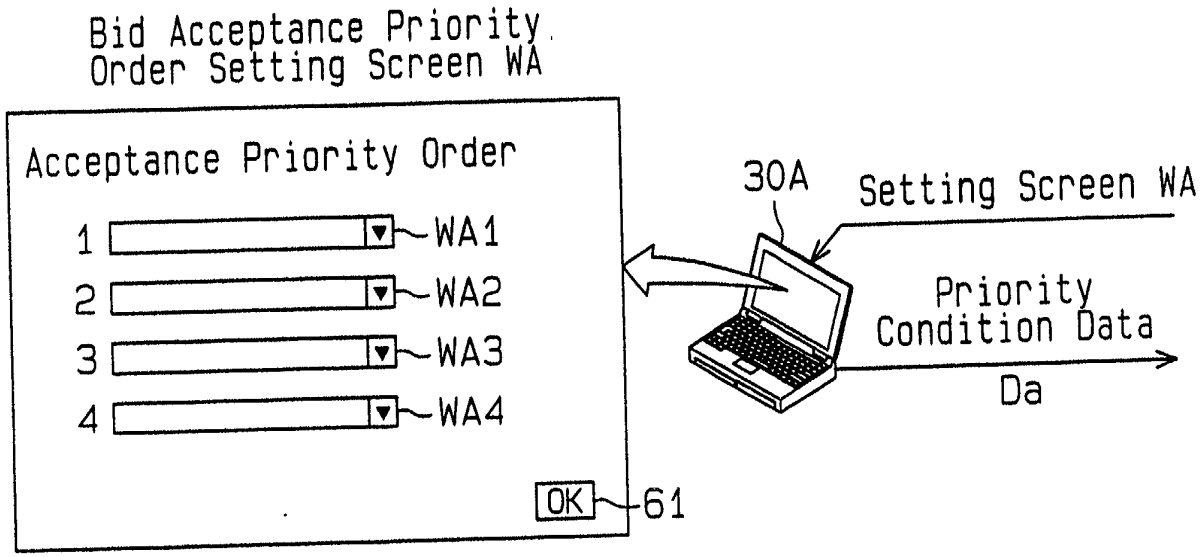

Bid Acceptance Priority Order Setting Screen WA
Acceptance Priority Order
1
2
3
4
WA1
WA2
WA3
WA4
OK
61
30A
Setting Screen WA
Priority Condition Data
Da

Fig.14

List Screen XA

List XA1

NO	Code Number	Trading Data	Condition offerd by bidder	
			Price	Article delivery date
1	00080	20 June	xxxxx Paying-in	20 June Shipment
2	00079	20 June	xxxxx Paying-in	20 June Shipment
3	00078	20 June	xxxxx Paying-in	20 June Delivery
4	00077	20 June	xxxxx Paying-in	25 June Shipment
5	00076	20 June	xxxxx Paying-in	20 June Delivery
6	00075	20 June	xxxxx Paying-in	1 July Shipment
7	00074	19 June	xxxxx Paying-in	19 June Shipment
•	•	•	• •	• •
•	•	•	• •	• •
•	•	•	• •	• •

Select successful bidder

NO. [ ] ~XA2

[OK] ~62

Fig.15

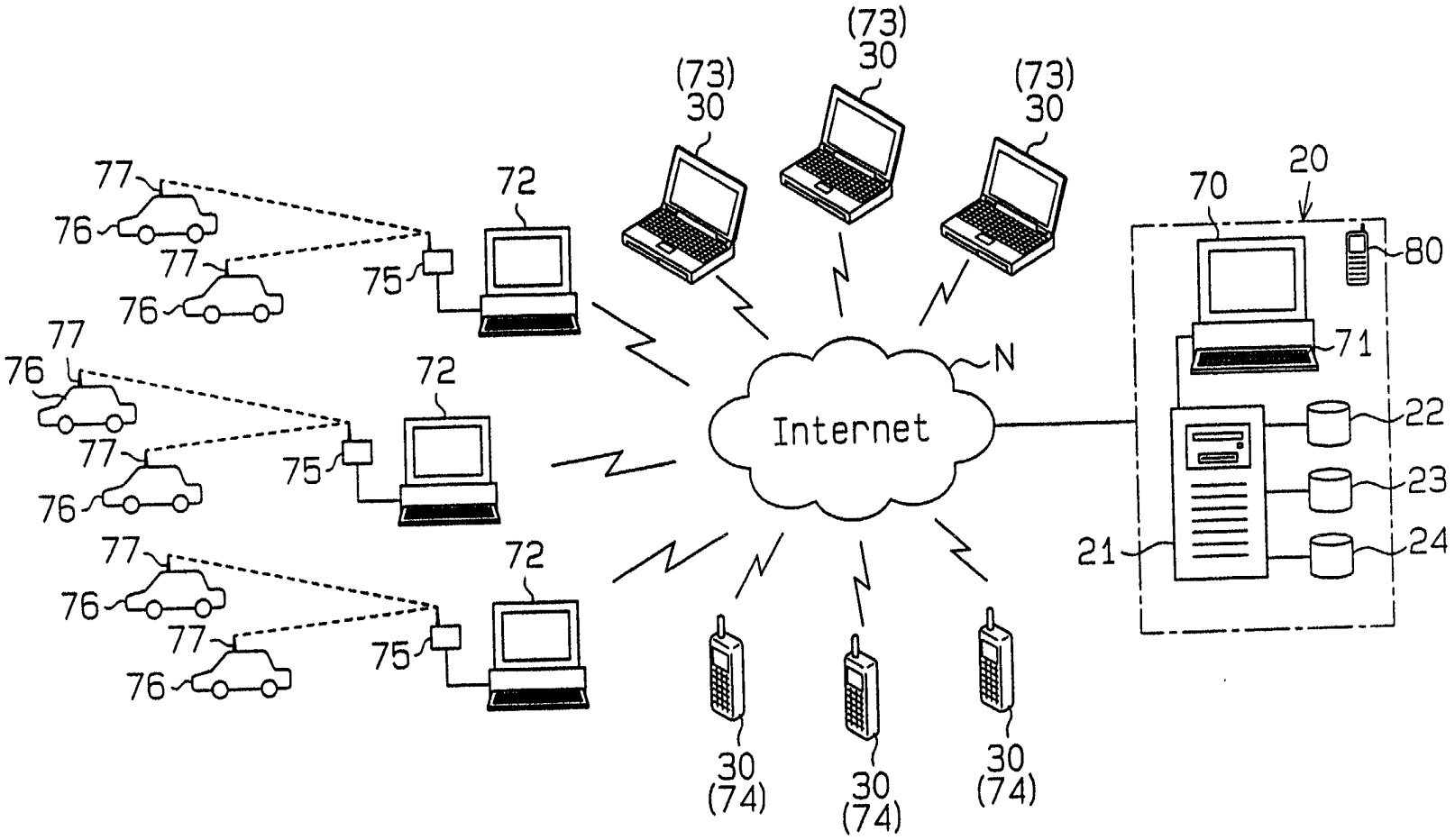

(73)
30
(73)
30
(73)
30
77
76
77
76
72
75
20
70
80
71
N
Internet
22
23
24
21
77
76
77
76
72
75
77
76
77
76
72
75
30
(74)
30
(74)
30
(74)

Fig.16

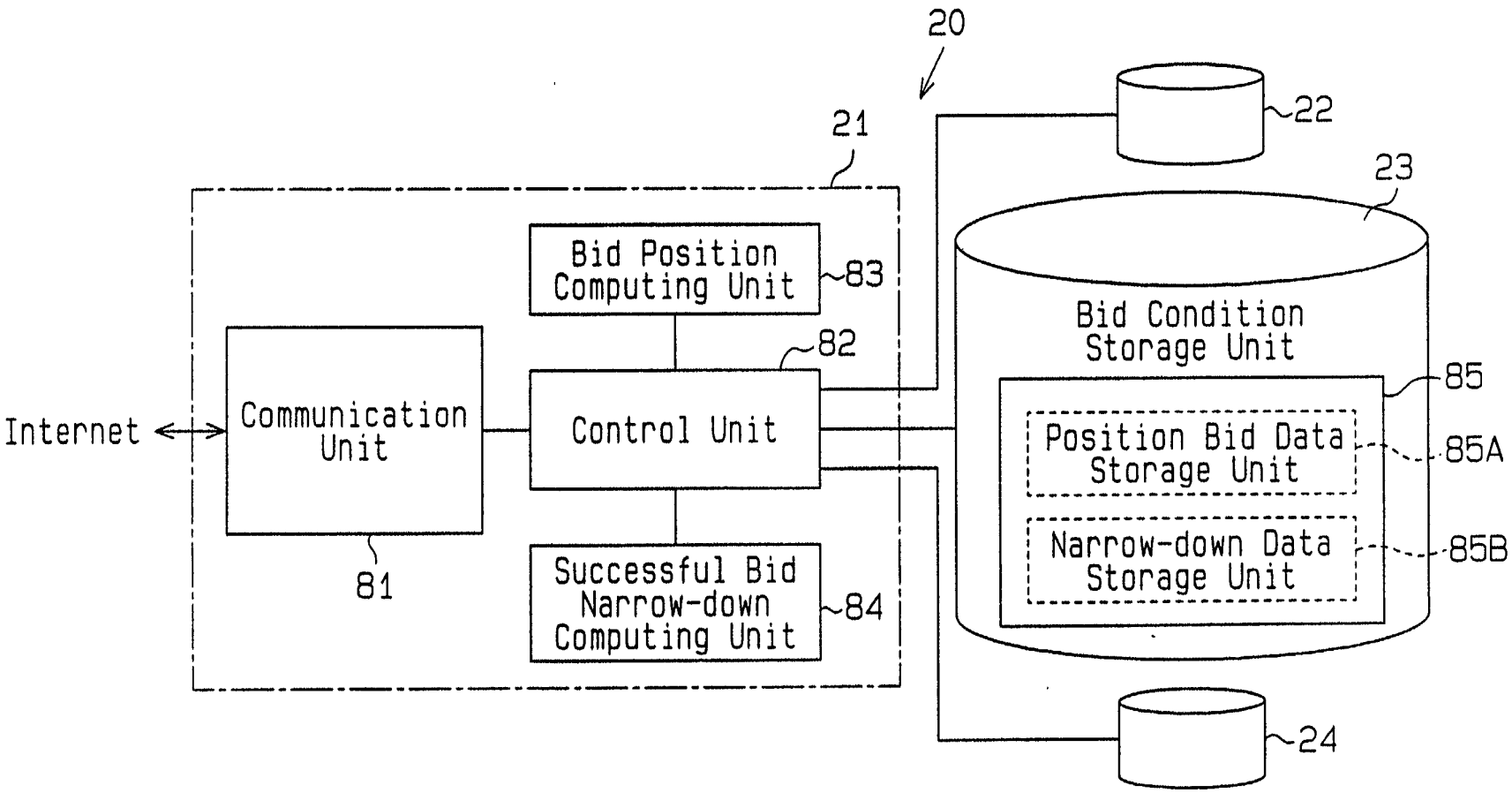

20
21
22
23
Bid Position Computing Unit
83
Bid Condition Storage Unit
82
85
Internet
Communication Unit
Control Unit
Position Bid Data Storage Unit
85A
Narrow-down Data Storage Unit
85B
81
Successful Bid Narrow-down Computing Unit
84
24

Fig.17(a)

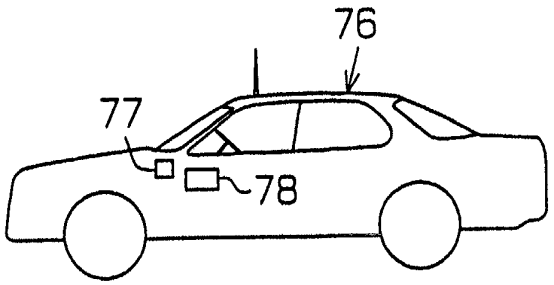


Fig.17(b)

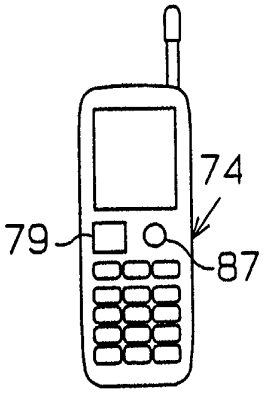


Fig.18

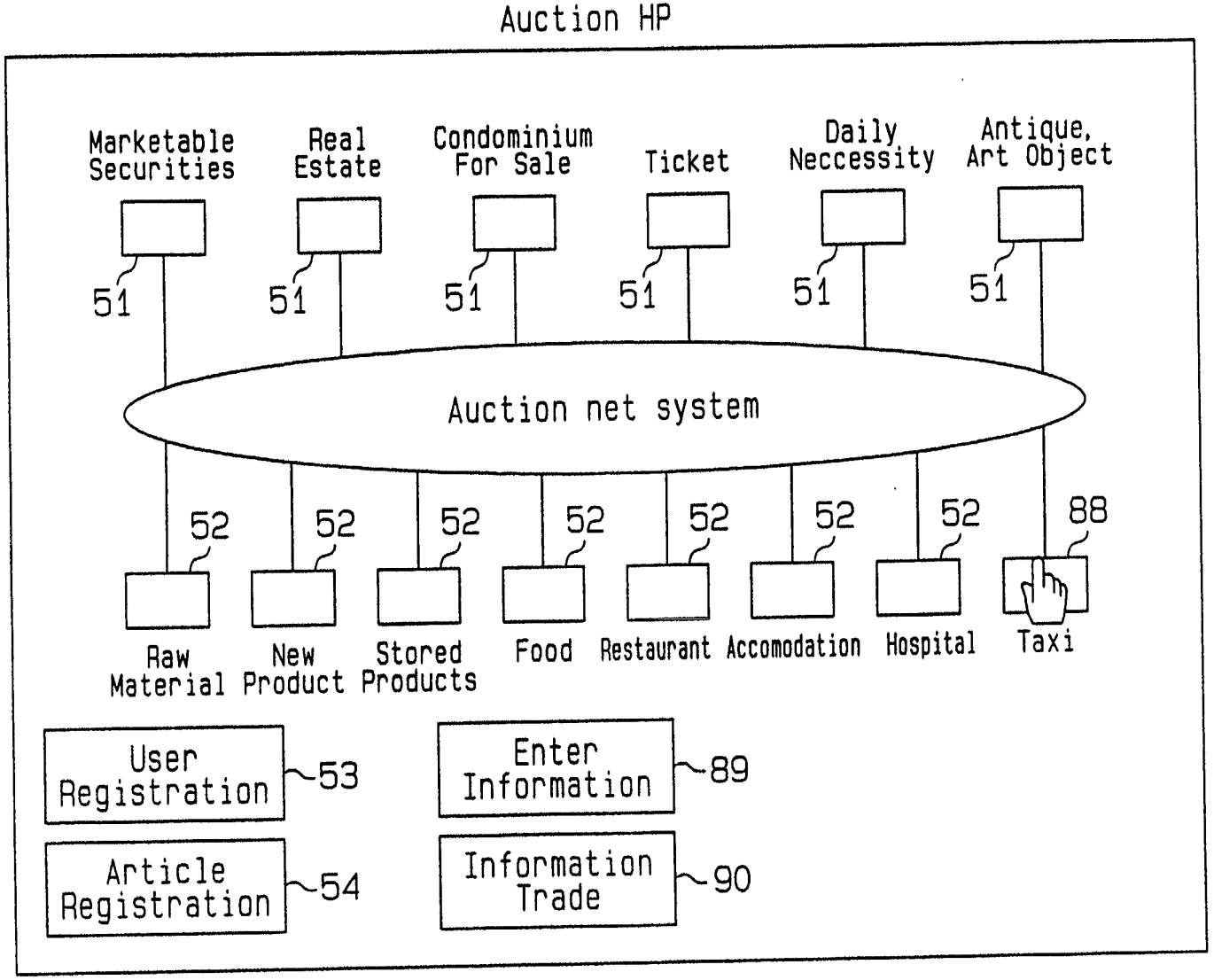

Auction HP
Marketable Securities
Real Estate
Condominium For Sale
Ticket
Daily Neccessity
Antique, Art Object
51
Auction net system
52
88
Raw Material
New Product
Stored Products
Food
Restaurant
Accomodation
Hospital
Taxi
User Registration
53
Enter Information
89
Article Registration
54
Information Trade
90

Fig.19

Taxi Allocation Screen F

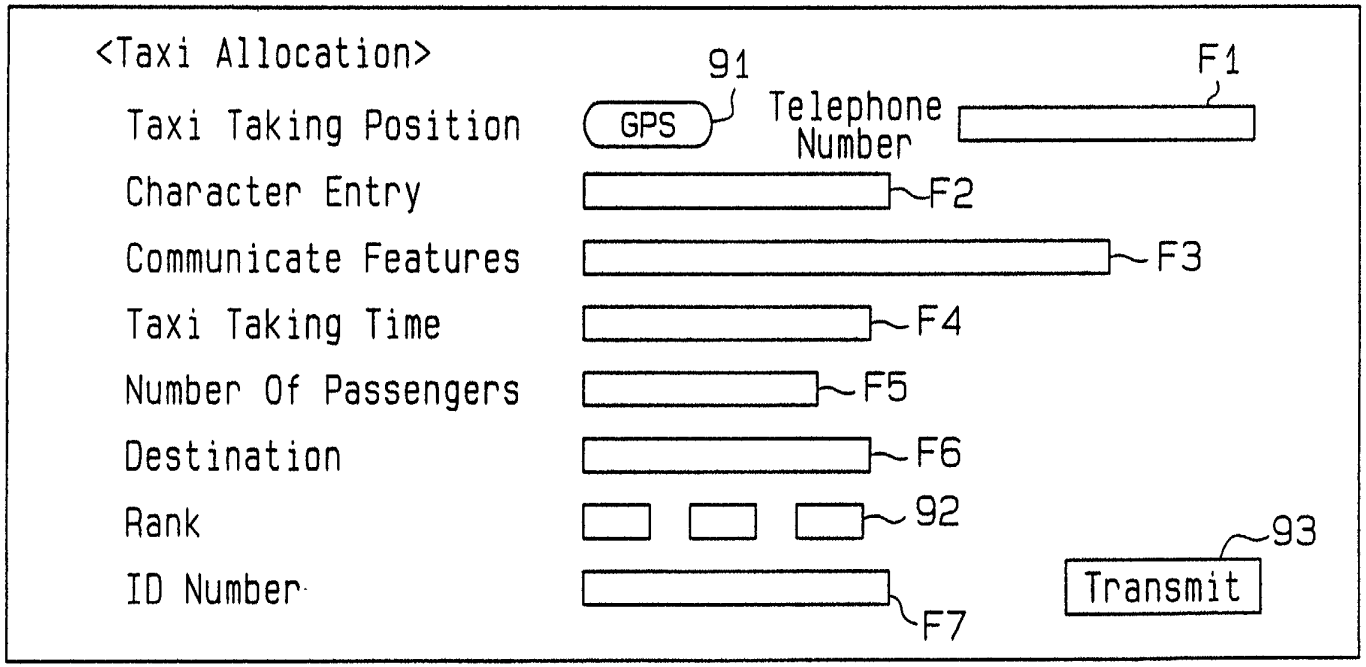


Fig.20

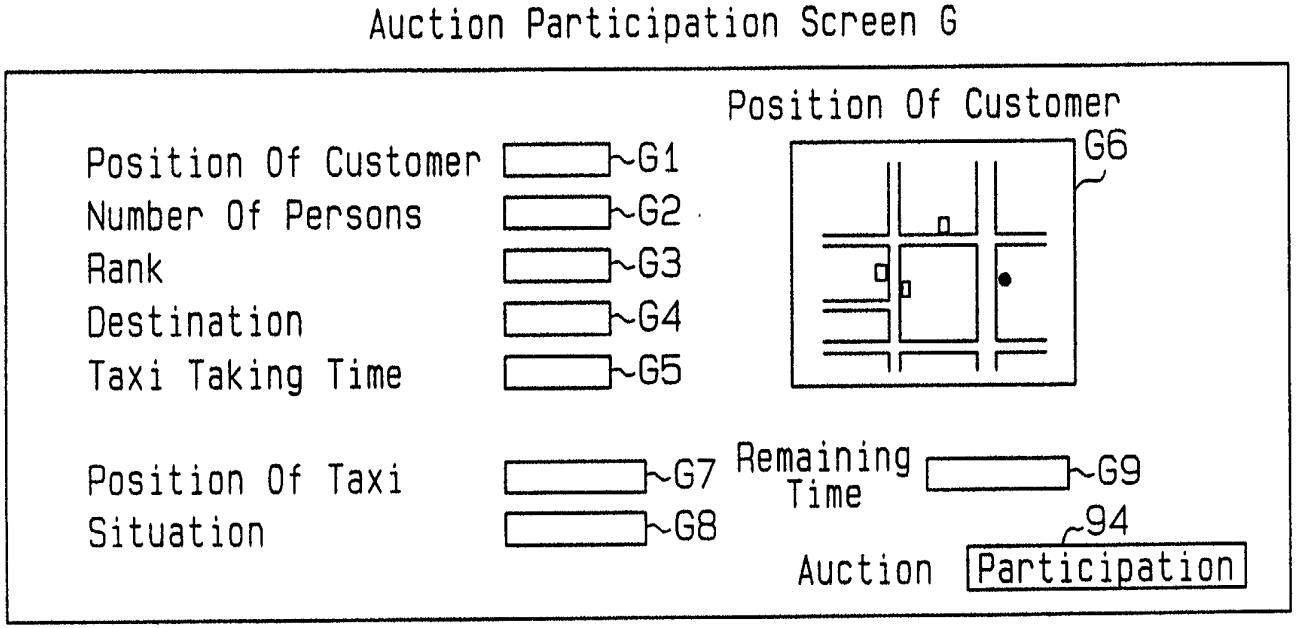

Auction Participation Screen G
Position Of Customer
Position Of Customer
G1
Number Of Persons
G2
Rank
G3
Destination
G4
Taxi Taking Time
G5
G6
Position Of Taxi
G7
Situation
G8
Remaining Time
G9
94
Auction
Participation

Fig.21 (a)

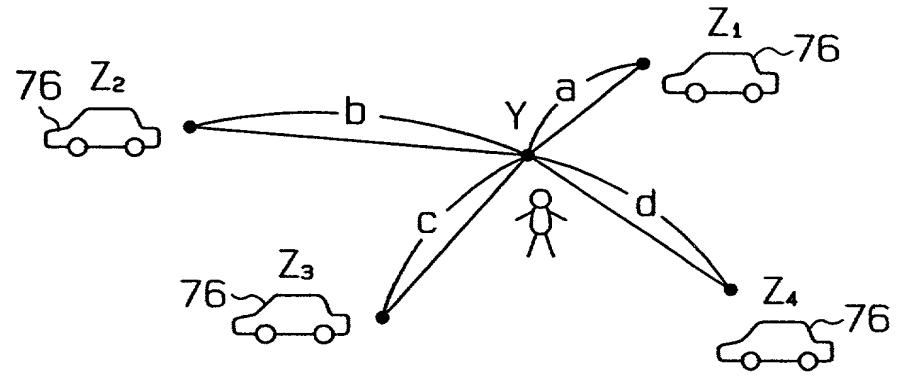


Fig.21 (b)

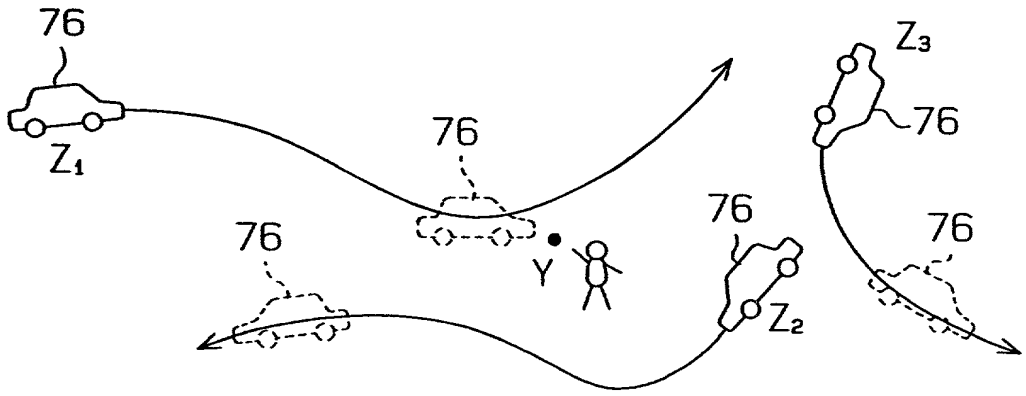


Fig.22

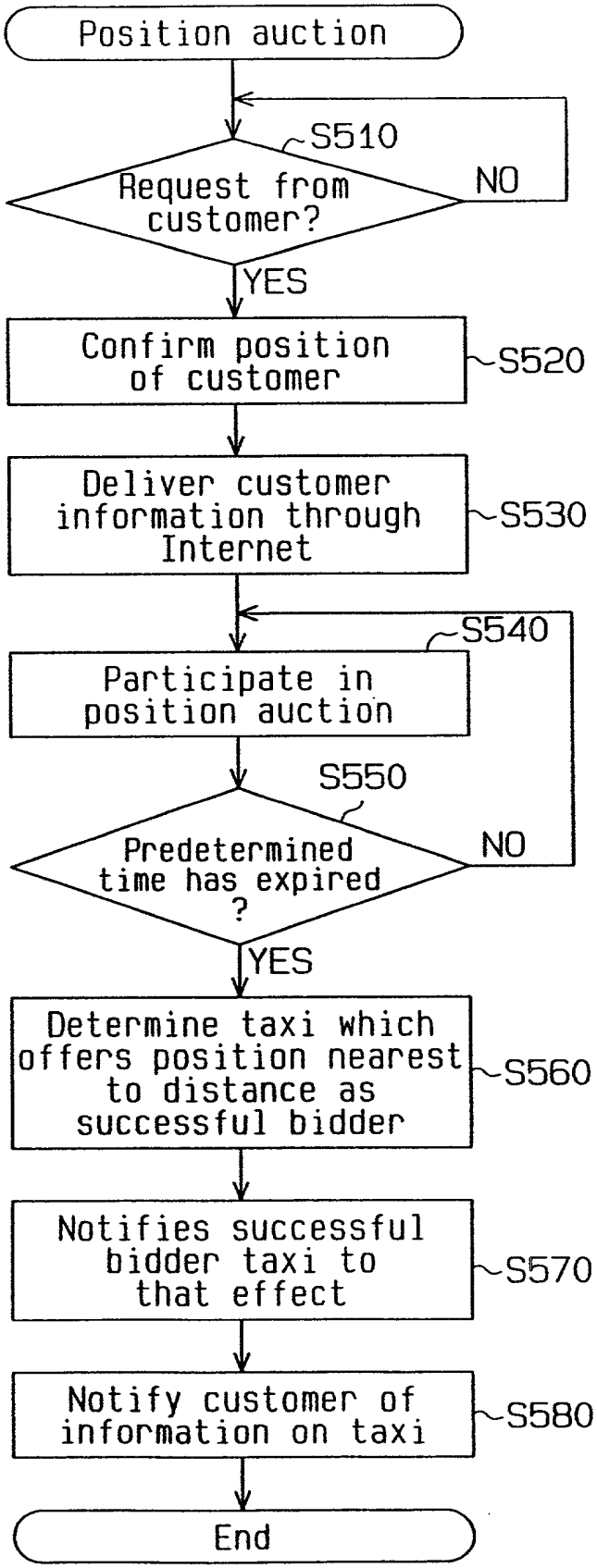

Position auction
S510
Request from customer?
NO
YES
Confirm position of customer
S520
Deliver customer information through Internet
S530
S540
Participate in position auction
S550
Predetermined time has expired ?
NO
YES
Determine taxi which offers position nearest to distance as successful bidder
S560
Notifies successful bidder taxi to that effect
S570
Notify customer of information on taxi
S580
End

Fig.23

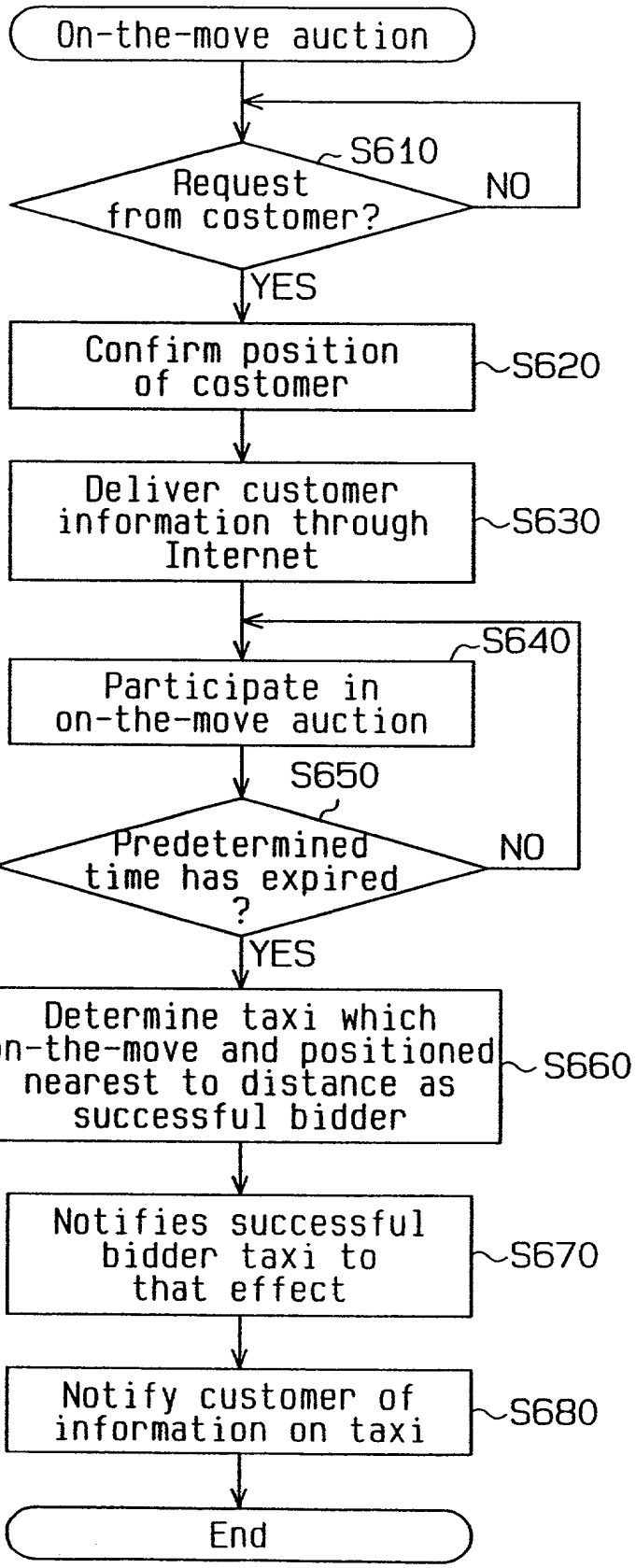

On-the-move auction
S610
Request from costomer?
NO
YES
Confirm position of costomer
S620
Deliver customer information through Internet
S630
S640
Participate in on-the-move auction
S650
Predetermined time has expired ?
NO
YES
Determine taxi which on-the-move and positioned nearest to distance as successful bidder
S660
Notifies successful bidder taxi to that effect
S670
Notify customer of information on taxi
S680
End

Fig.24

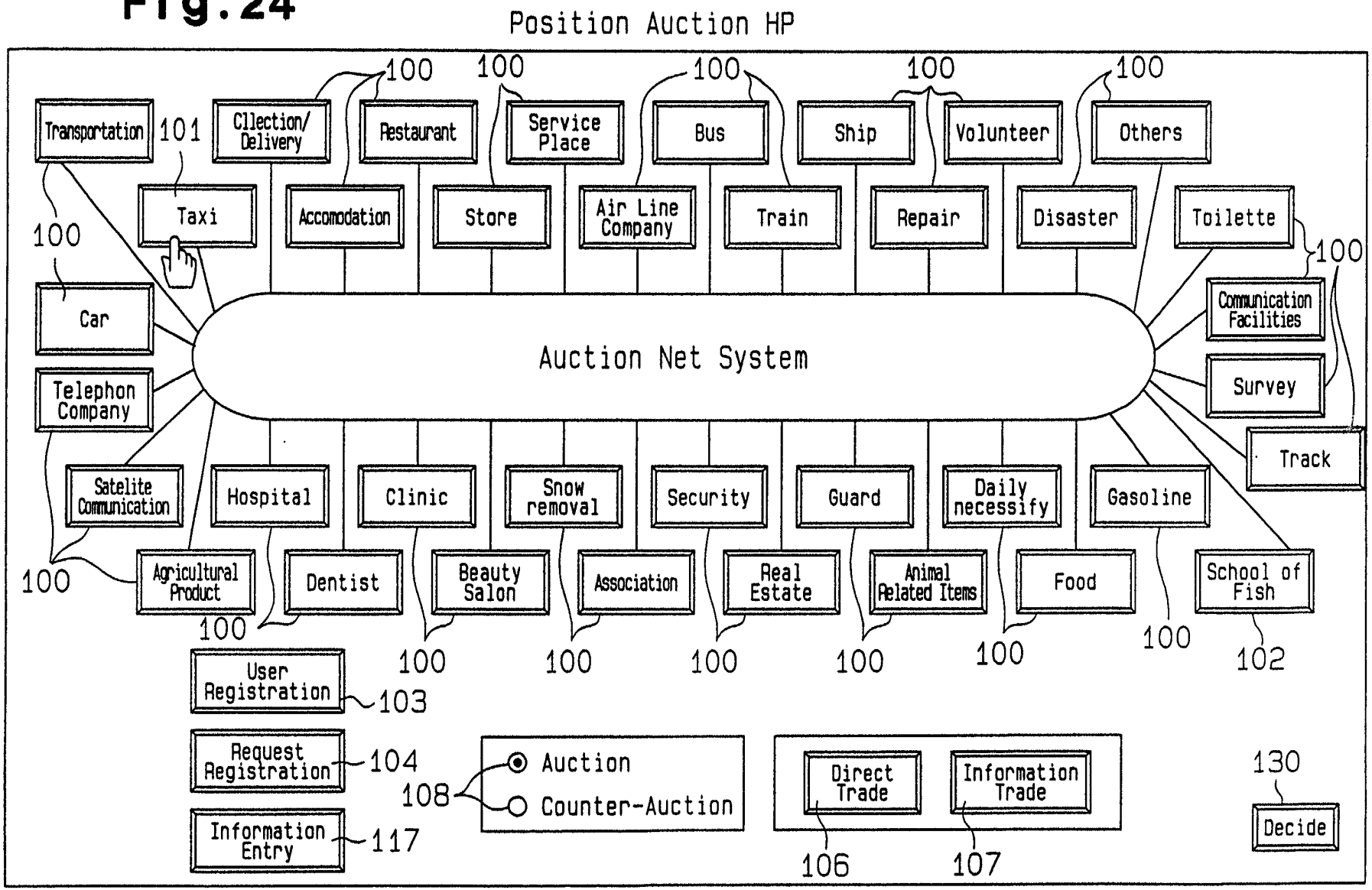

Position Auction HP
Transportation
101
Cllection/ Delivery
Restaurant
Service Place
Bus
Ship
Volunteer
Others
100
Taxi
Accomodation
Store
Air Line Company
Train
Repair
Disaster
Toilette
Car
Auction Net System
Communication Facilities
Survey
Track
Telephon Company
Satelite Communication
Hospital
Clinic
Snow removal
Security
Guard
Daily necessify
Gasoline
Agricultural Product
Dentist
Beauty Salon
Association
Real Estate
Animal Related Items
Food
School of Fish
102
User Registration
103
Request Registration
104
Information Entry
117
108
Auction
Counter-Auction
Direct Trade
Information Trade
106
107
130
Decide

Fig.25

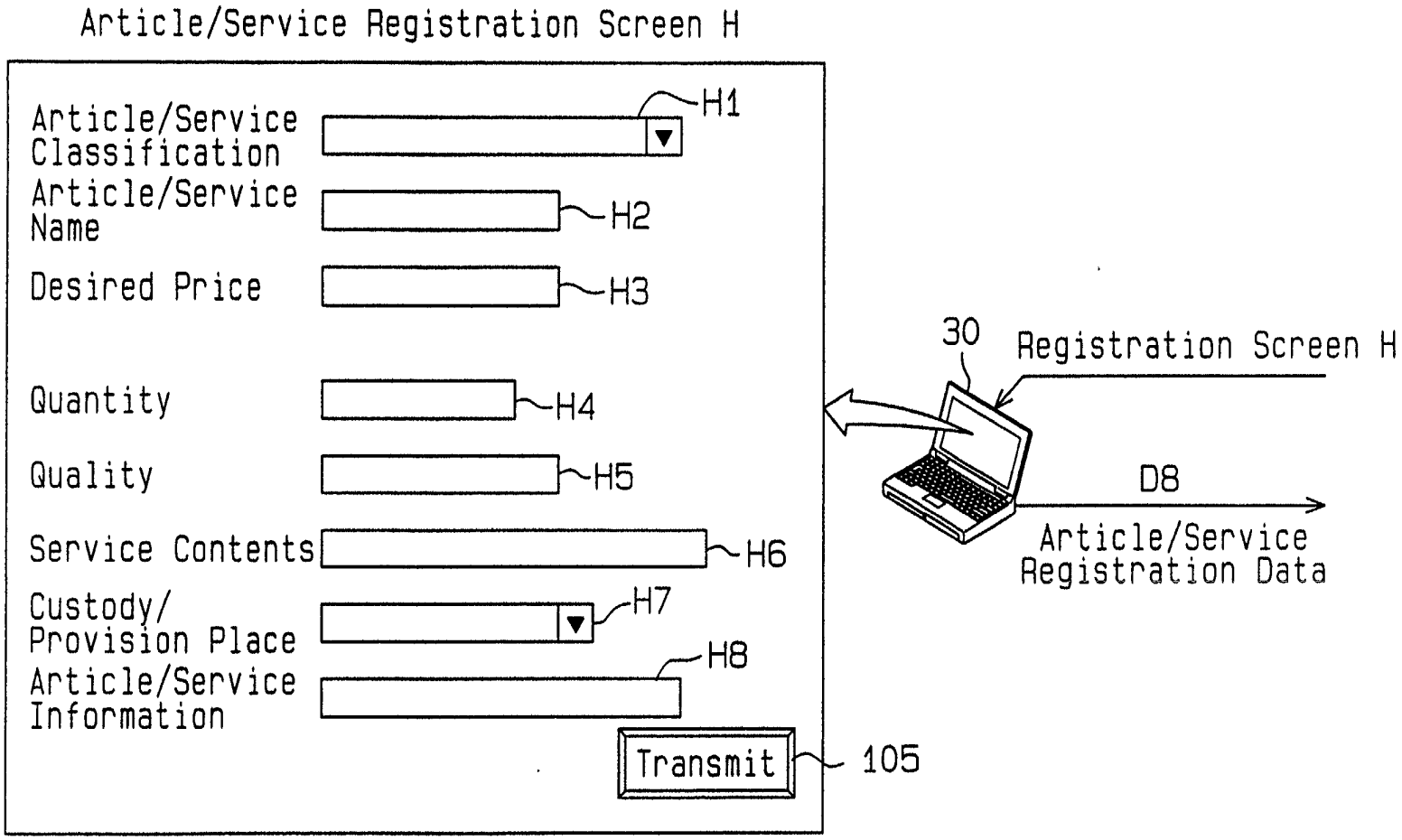

Article/Service Registration Screen H
Article/Service Classification
H1
Article/Service Name
H2
Desired Price
H3
Quantity
H4
Quality
H5
Service Contents
H6
Custody/ Provision Place
H7
Article/Service Information
H8
Transmit
105
30
Registration Screen H
D8
Article/Service Registration Data

Fig.26

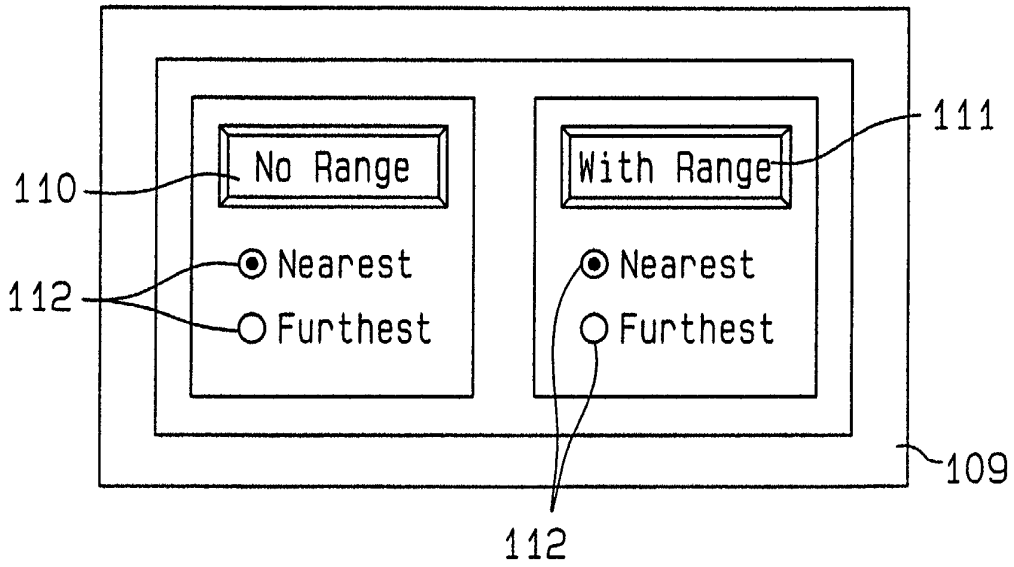

No Range
With Range
Nearest
Furthest
Nearest
Furthest
110
111
112
112
109

Fig.27(a)

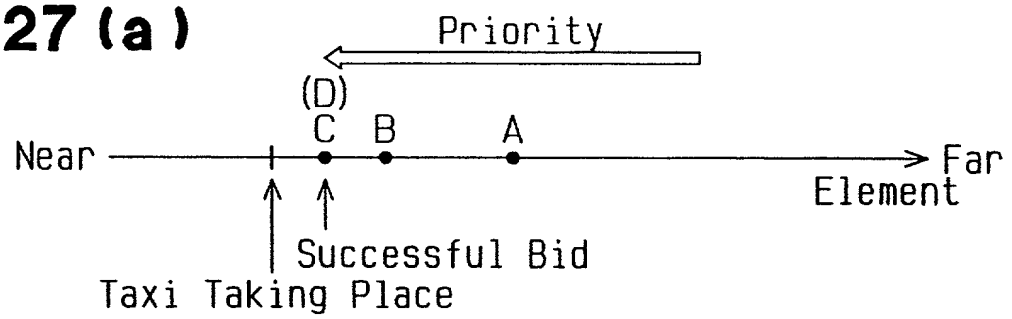


Fig.27(b)

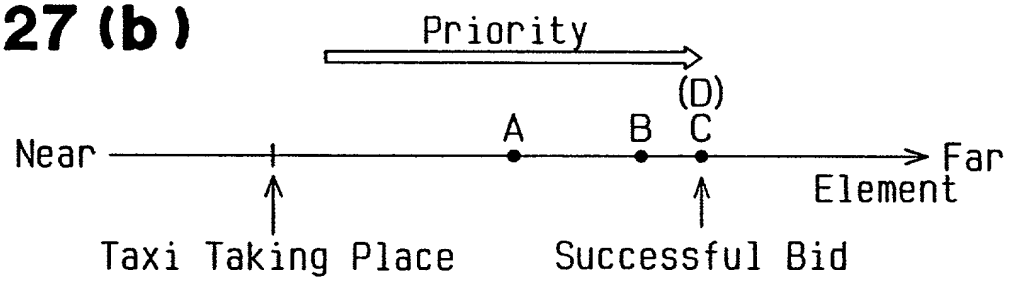


Fig.27(c)

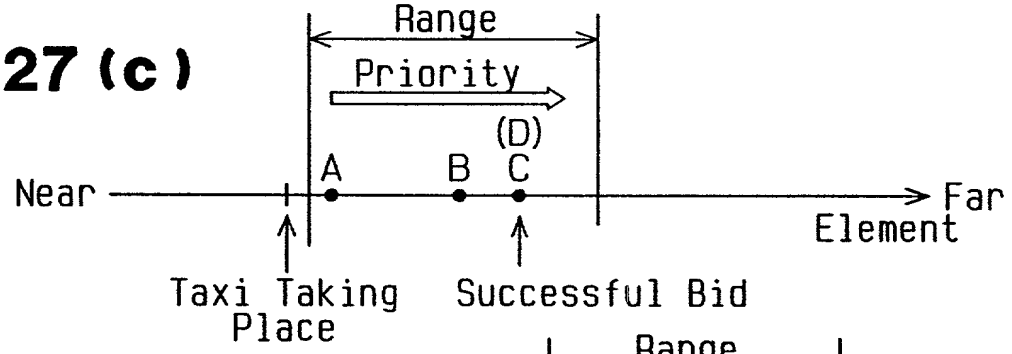


Fig.27(d)

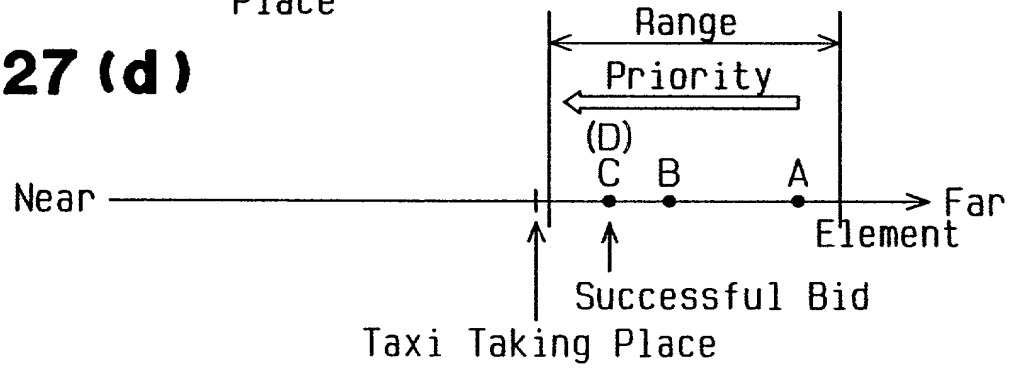


Fig.27(e)

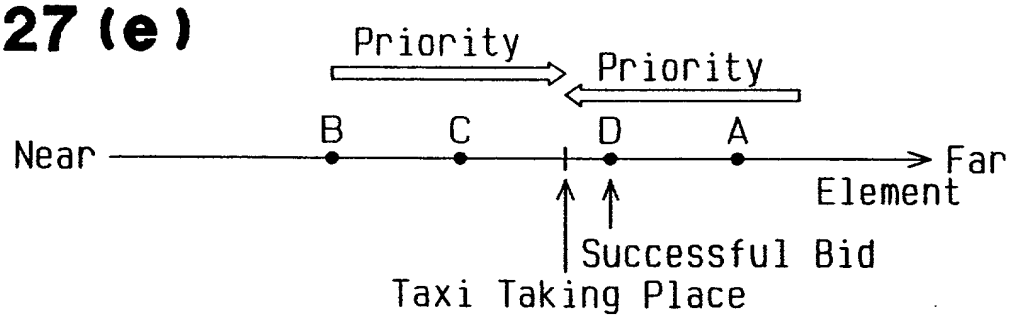


Fig.28

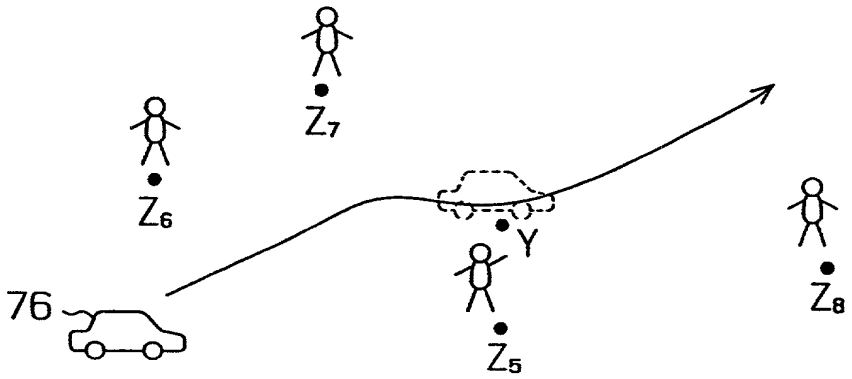


Fig.29

List Screen XB

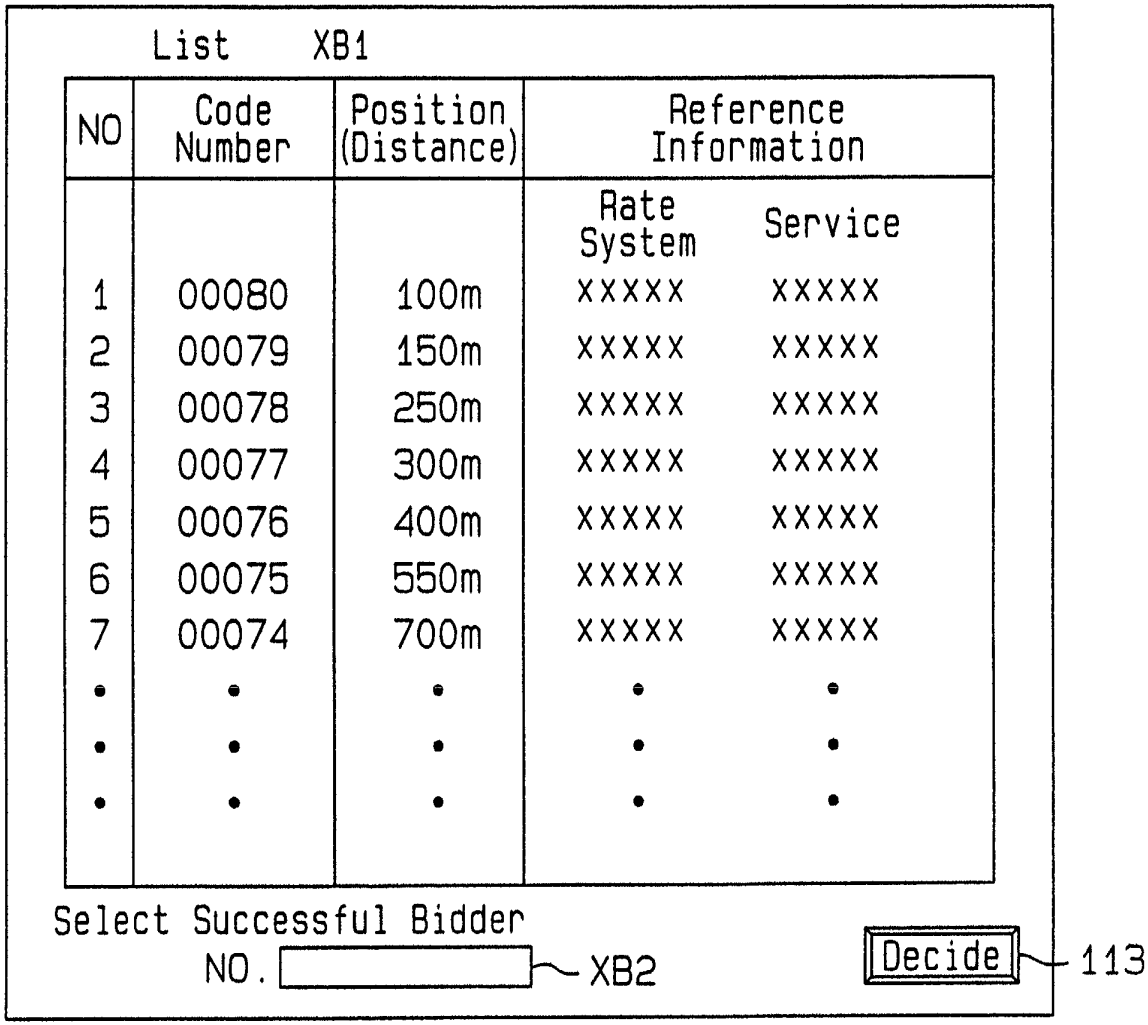
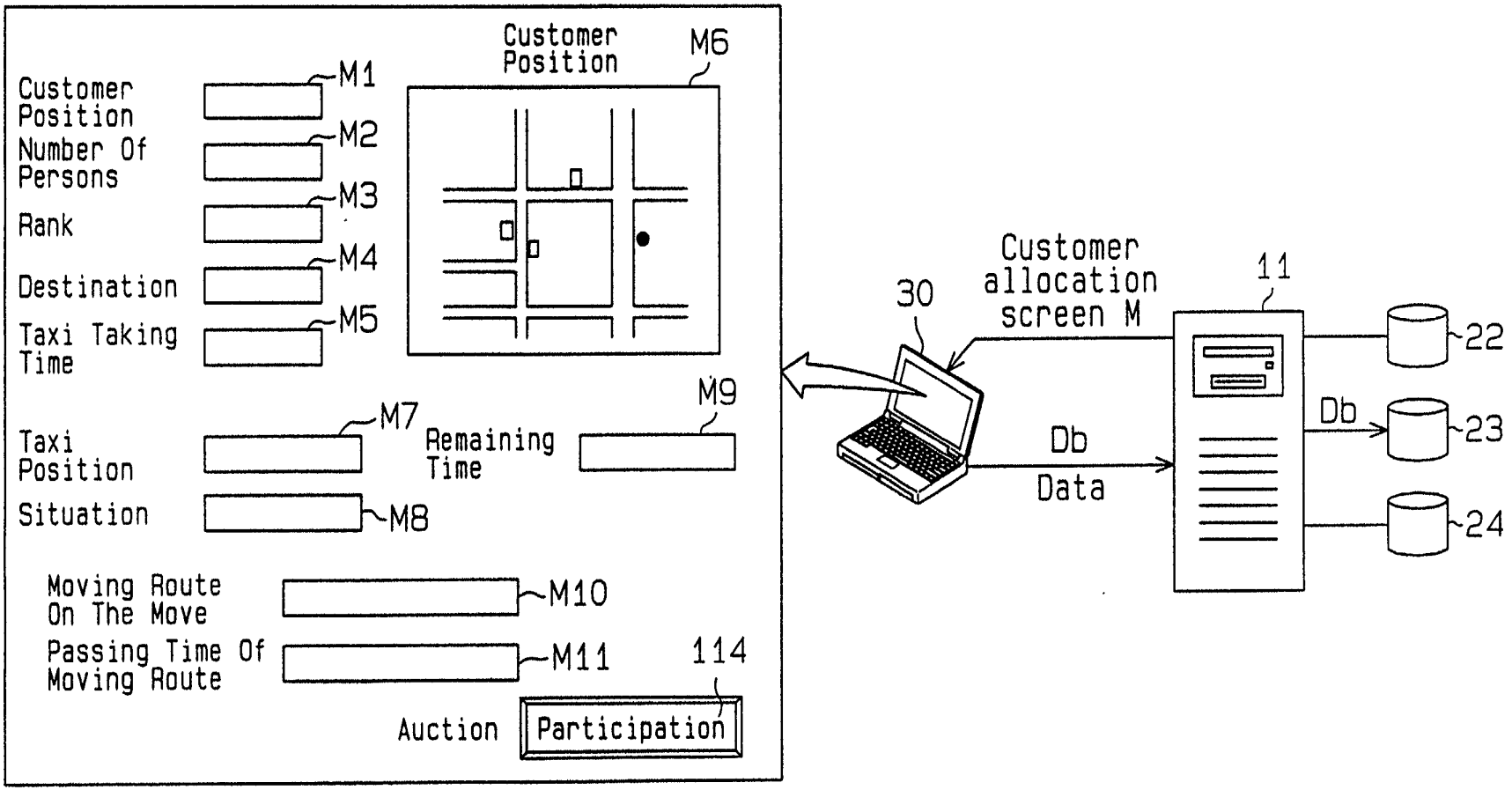


Fig.30



Customer allocation screen M

Fig.31

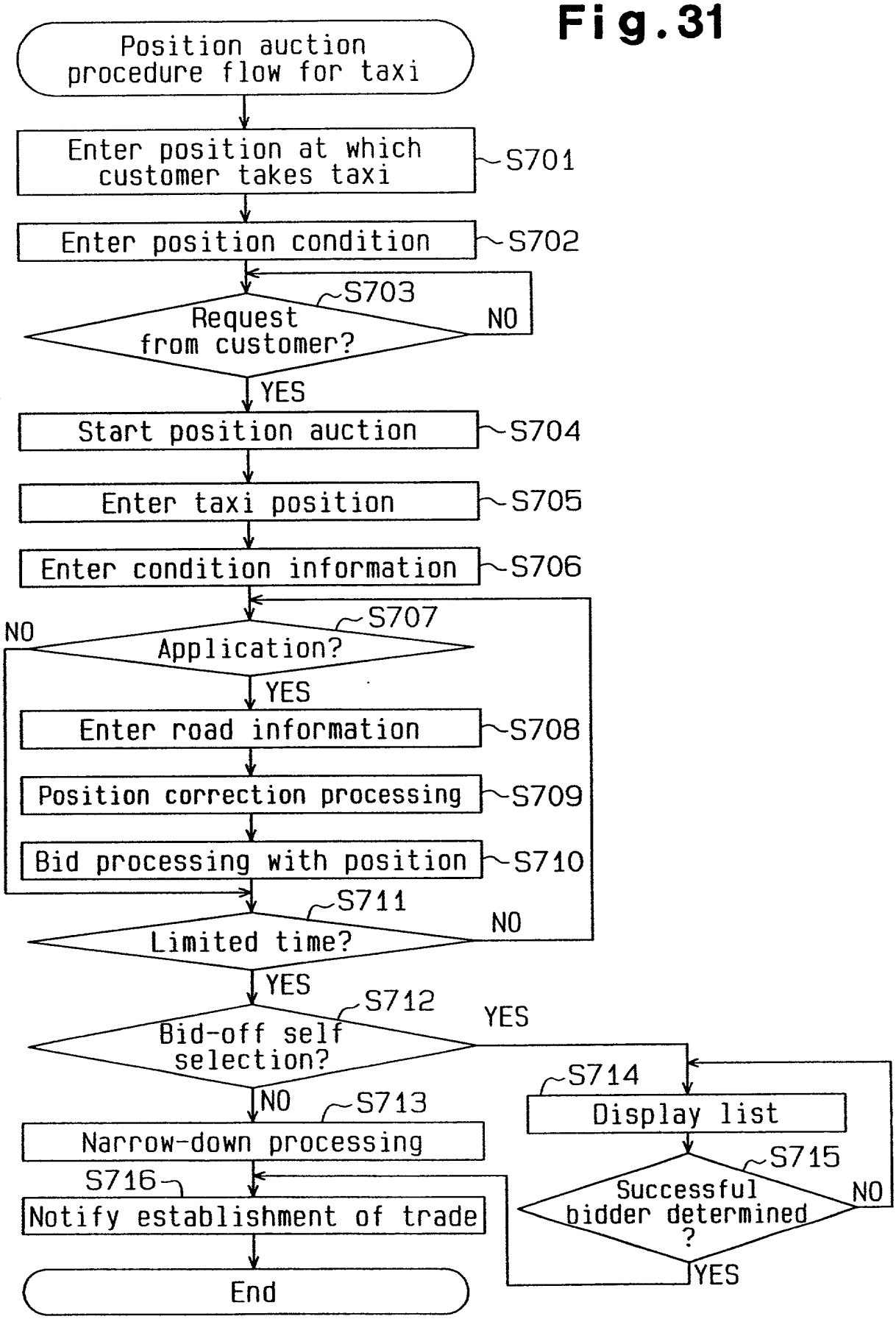
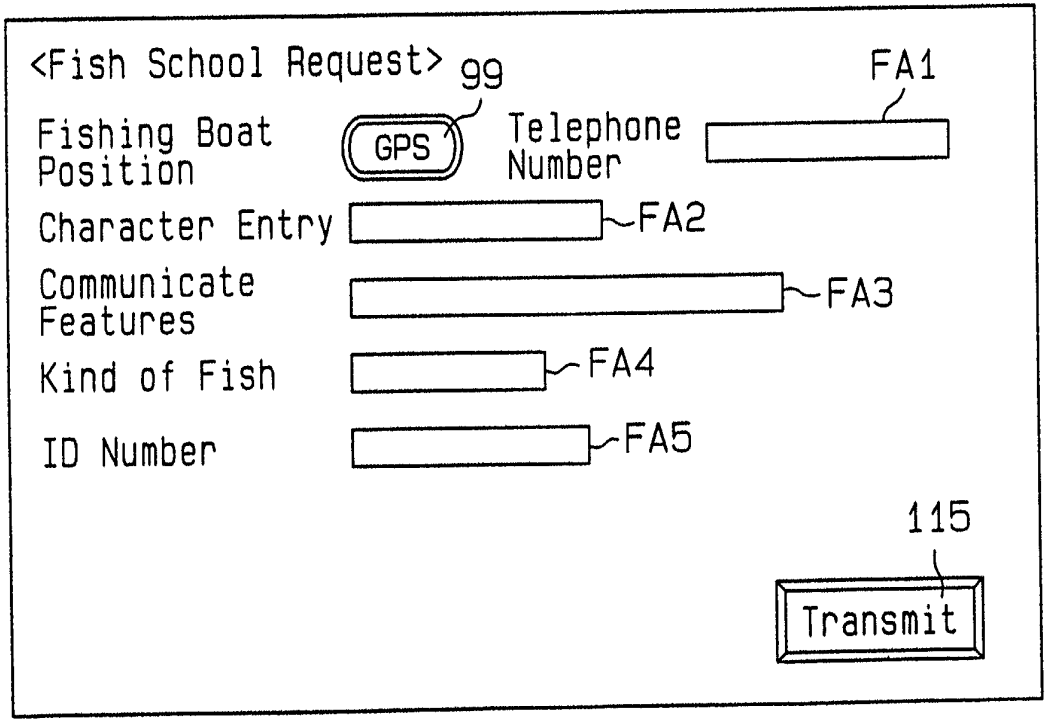
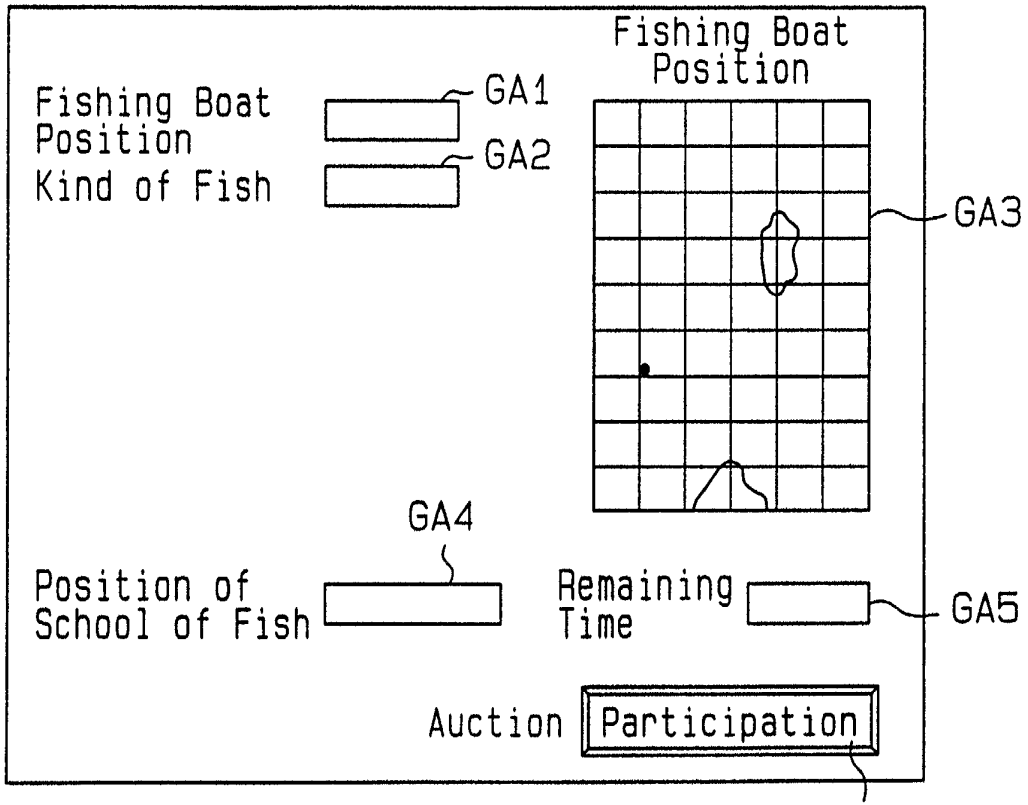

Position auction procedure flow for taxi
Enter position at which customer takes taxi
S701
Enter position condition
S702
S703
Request from customer?
NO
YES
Start position auction
S704
Enter taxi position
S705
Enter condition information
S706
S707
NO
Application?
YES
Enter road information
S708
Position correction processing
S709
Bid processing with position
S710
S711
Limited time?
NO
YES
S712
Bid-off self selection?
YES
NO
S713
Narrow-down processing
S714
Display list
S715
Successful bidder determined ?
NO
YES
S716
Notify establishment of trade
End

Fig.32



Fish School Position Requesting Screen FA

Fig.33



Auction Participation Screen GA

Fig.34

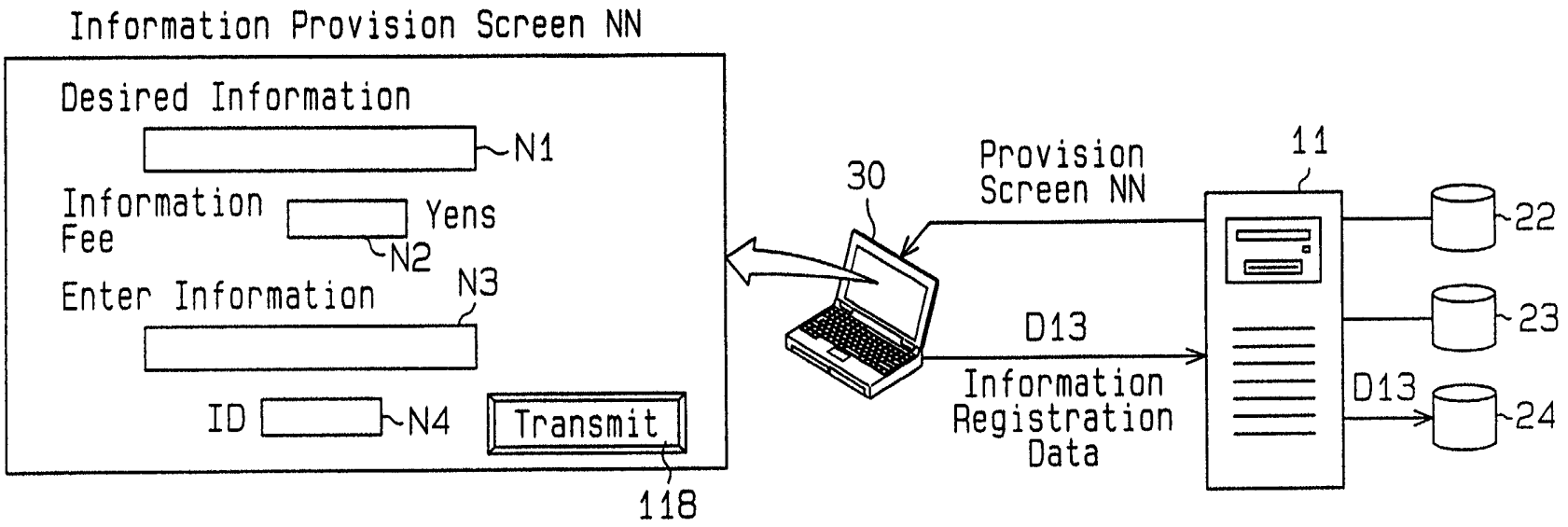

Information Provision Screen NN
Desired Information
N1
Information Fee
Yens
N2
Enter Information
N3
ID
N4
Transmit
118
30
Provision Screen NN
11
22
23
24
D13
D13
Information Registration Data

Fig.35

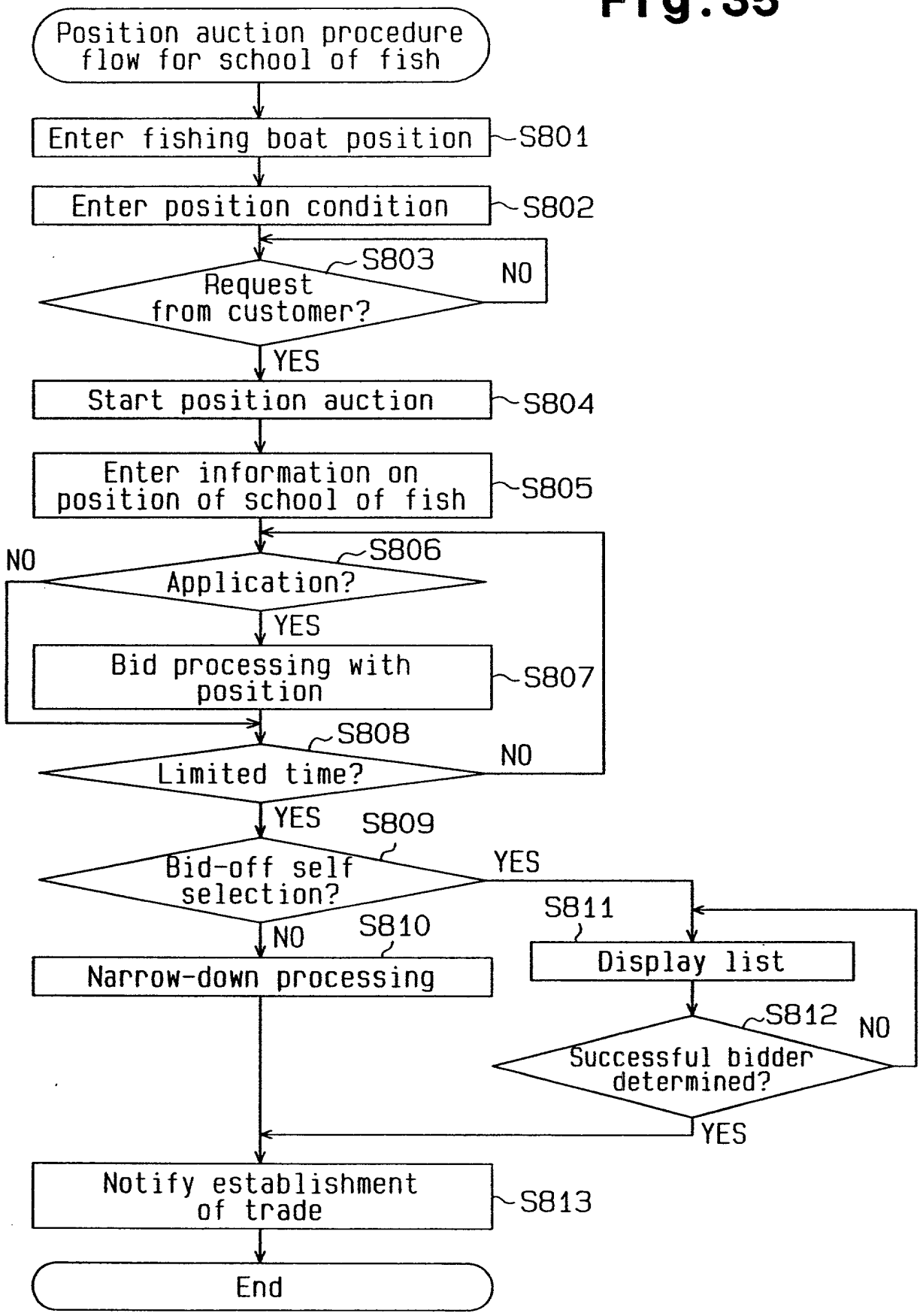

Position auction procedure flow for school of fish
Enter fishing boat position
S801
Enter position condition
S802
S803
Request from customer?
NO
YES
Start position auction
S804
Enter information on position of school of fish
S805
S806
NO
Application?
YES
Bid processing with position
S807
S808
Limited time?
NO
YES
S809
Bid-off self selection?
YES
NO
S810
Narrow-down processing
S811
Display list
S812
NO
Successful bidder determined?
YES
Notify establishment of trade
S813
End

Fig.36

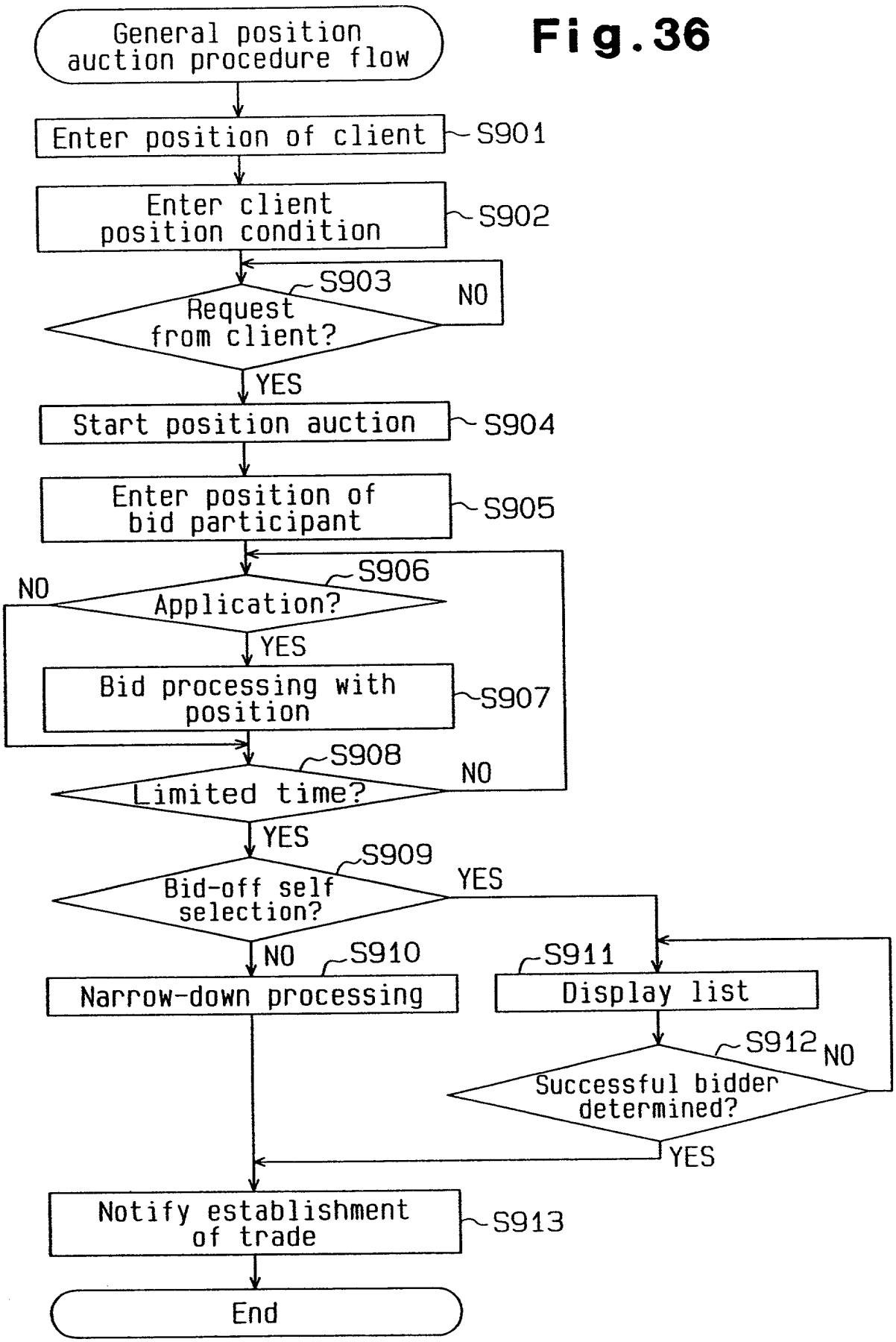

General position auction procedure flow
Enter position of client
S901
Enter client position condition
S902
S903
Request from client?
NO
YES
Start position auction
S904
Enter position of bid participant
S905
S906
Application?
NO
YES
Bid processing with position
S907
S908
Limited time?
NO
YES
S909
Bid-off self selection?
YES
NO
S910
Narrow-down processing
S911
Display list
S912
Successful bidder determined?
NO
YES
Notify establishment of trade
S913
End

Fig.37

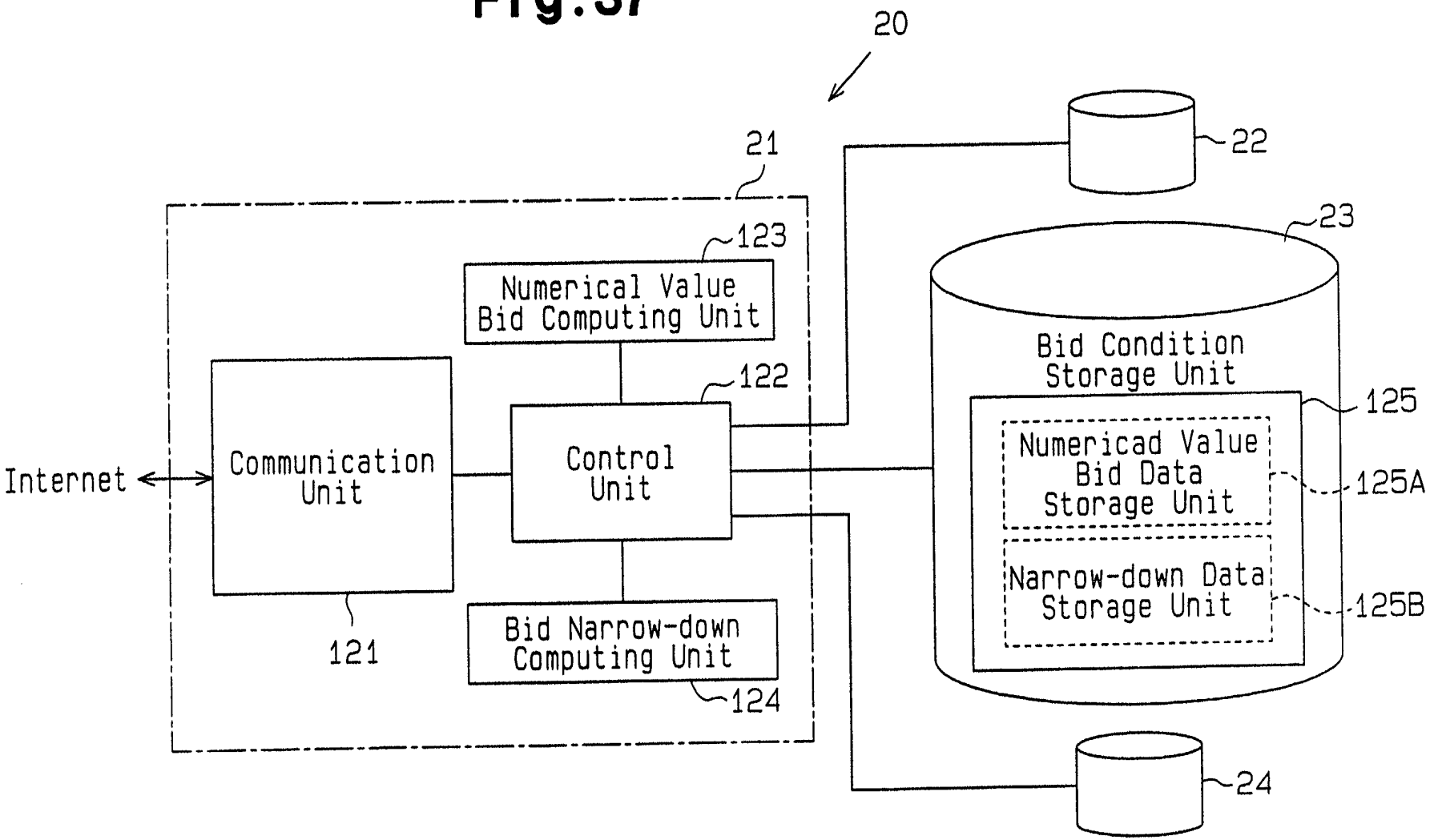
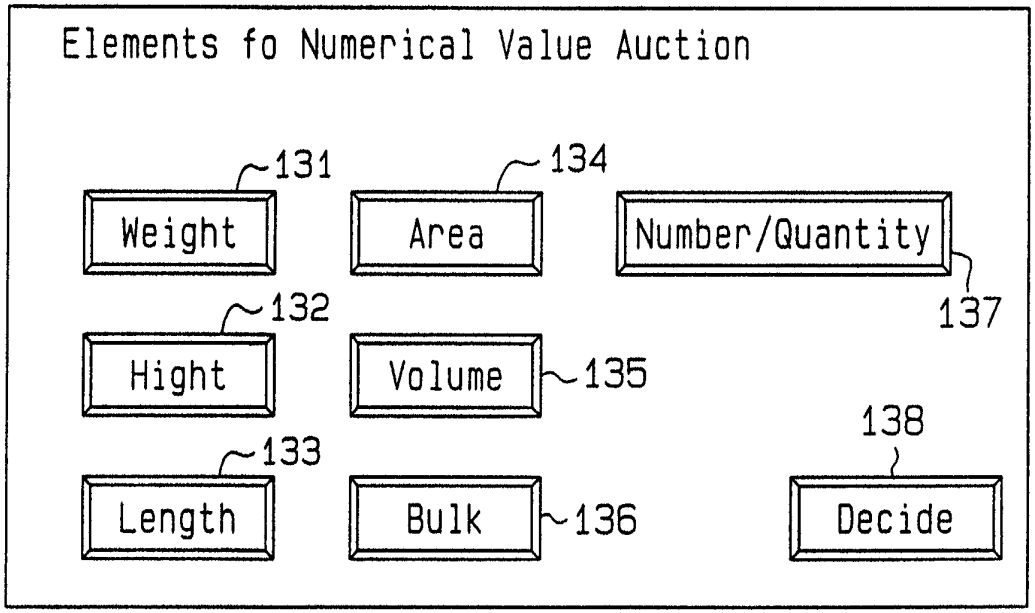

20
21
22
23
123
Numerical Value
Bid Computing Unit
122
Bid Condition
Storage Unit
125
Numericad Value
Bid Data
Storage Unit
125A
Narrow-down Data
Storage Unit
125B
Internet
Communication
Unit
Control
Unit
121
Bid Narrow-down
Computing Unit
124
24

Fig.38



Numerical Value Dimension Selection Screen J

Fig.39

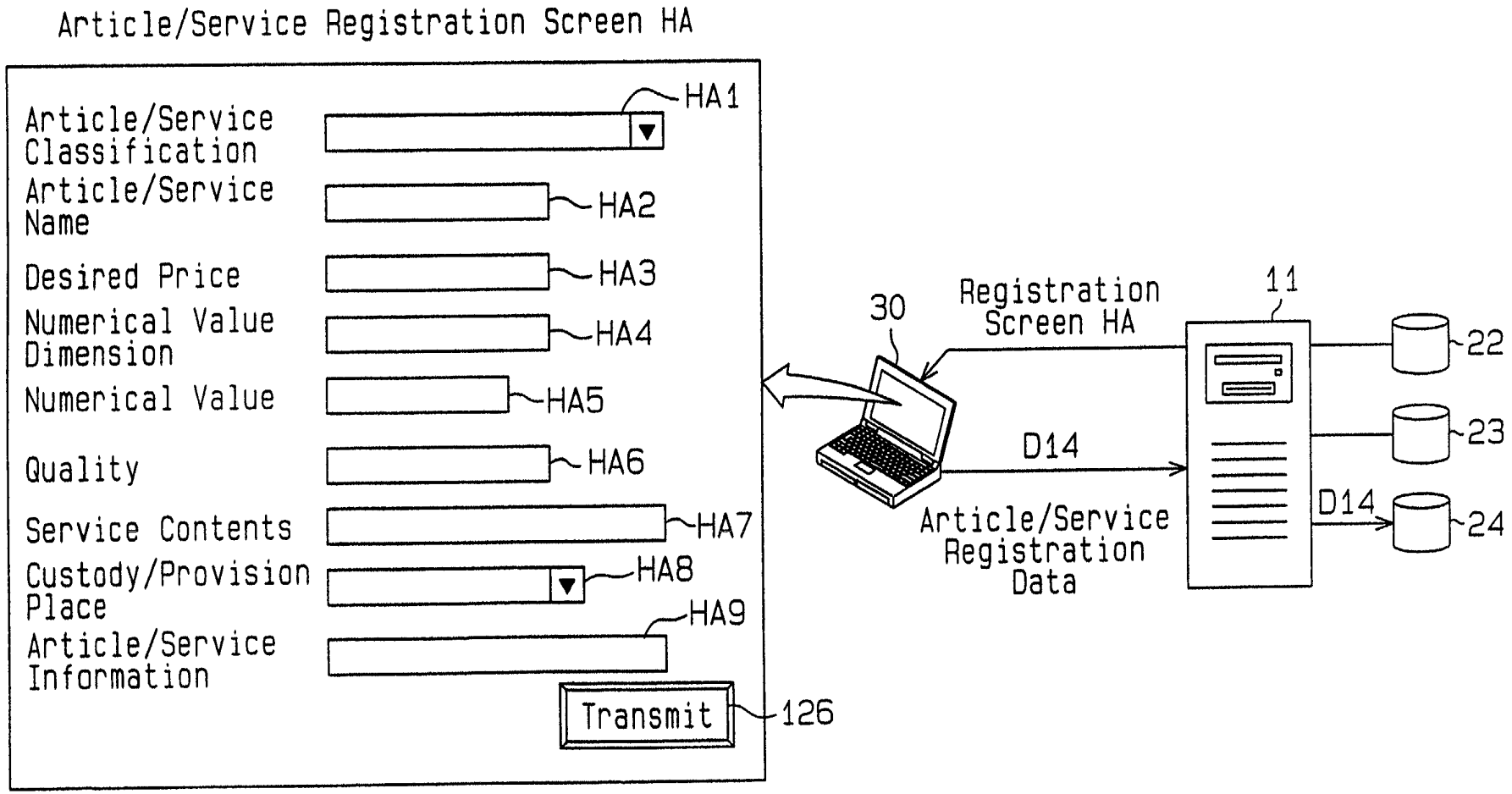
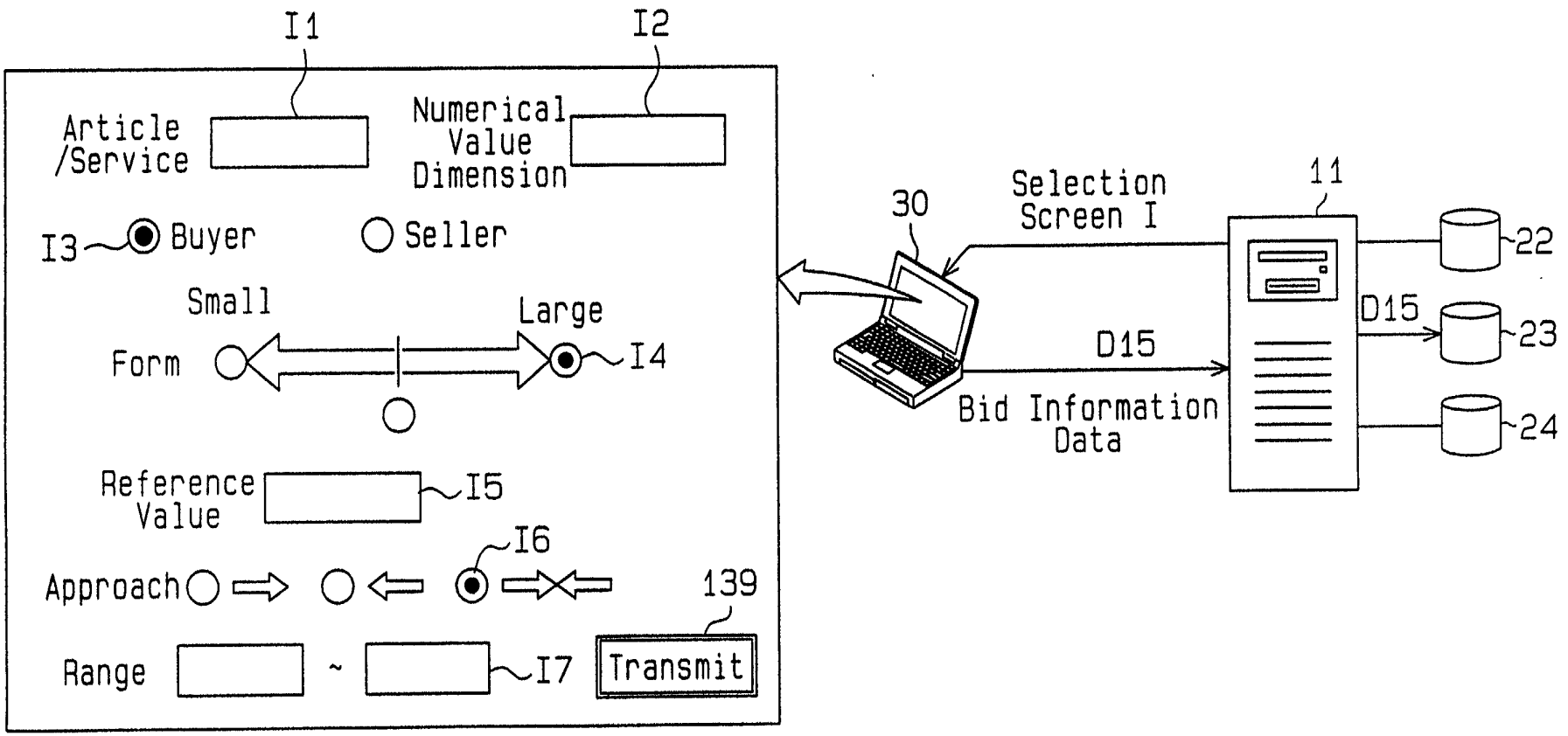

Article/Service Registration Screen HA
Article/Service Classification
HA1
Article/Service Name
HA2
Desired Price
HA3
Numerical Value Dimension
HA4
Numerical Value
HA5
Quality
HA6
Service Contents
HA7
Custody/Provision Place
HA8
Article/Service Information
HA9
Transmit
126
30
Registration Screen HA
11
22
23
24
D14
D14
Article/Service Registration Data

Fig.40



Bid Form Selection Screen I

Fig.41

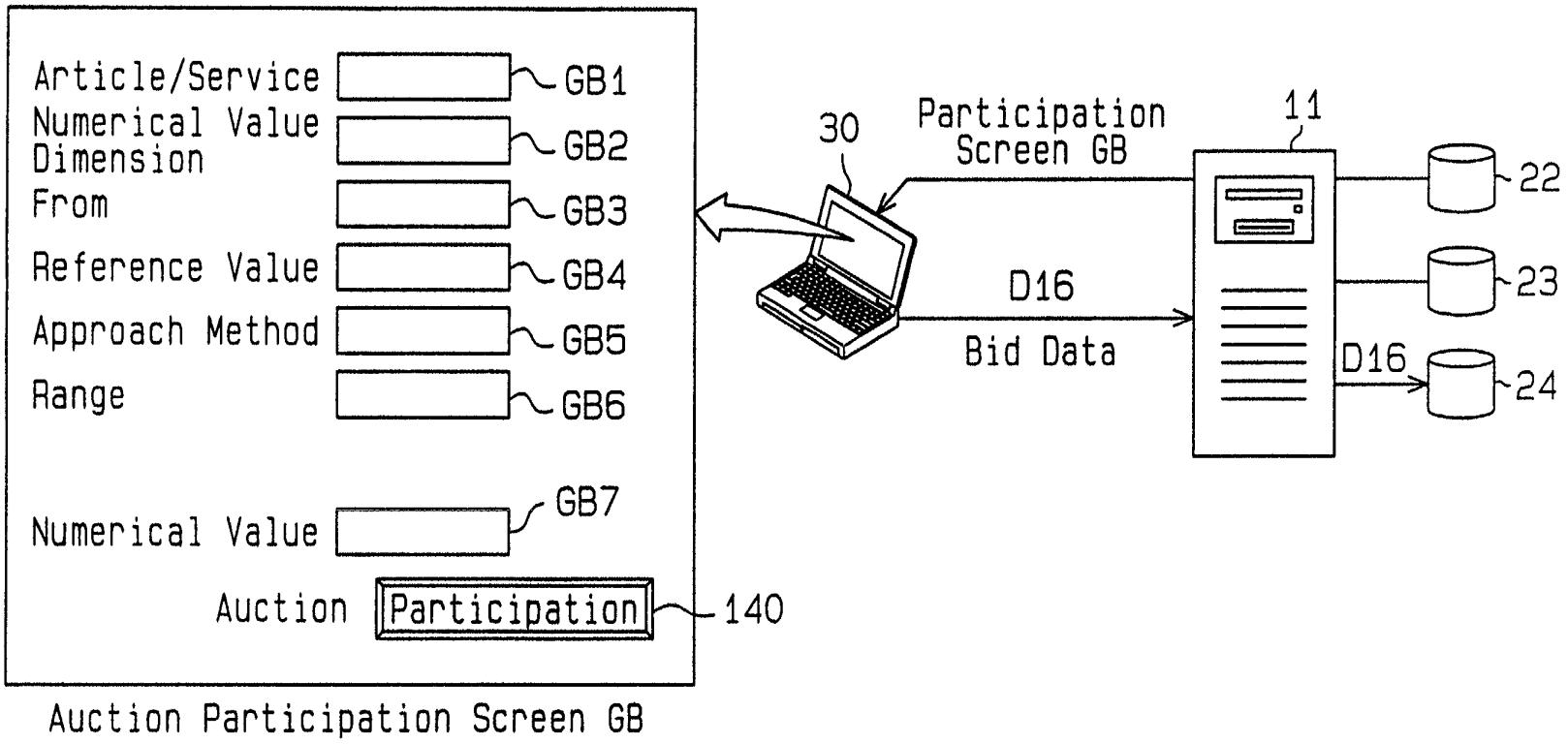

Article/Service
GB1
Numerical Value Dimension
GB2
From
GB3
Reference Value
GB4
Approach Method
GB5
Range
GB6
Numerical Value
GB7
Auction
Participation
140
Auction Participation Screen GB
30
Participation Screen GB
11
22
23
24
D16
Bid Data
D16

Fig.42

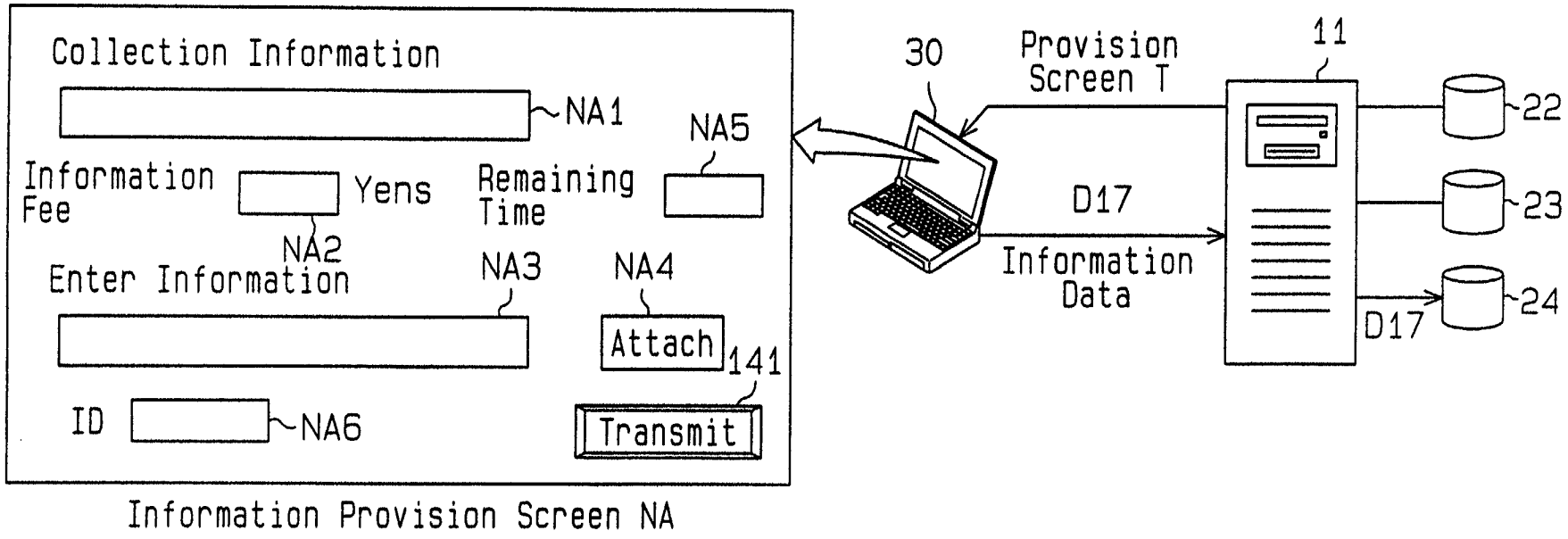

Collection Information
NA1
NA5
Information Fee
Yens
Remaining Time
NA2
Enter Information
NA3
NA4
Attach
141
ID
NA6
Transmit
Information Provision Screen NA
30
Provision Screen T
11
22
23
24
D17
Information Data
D17

Fig.43

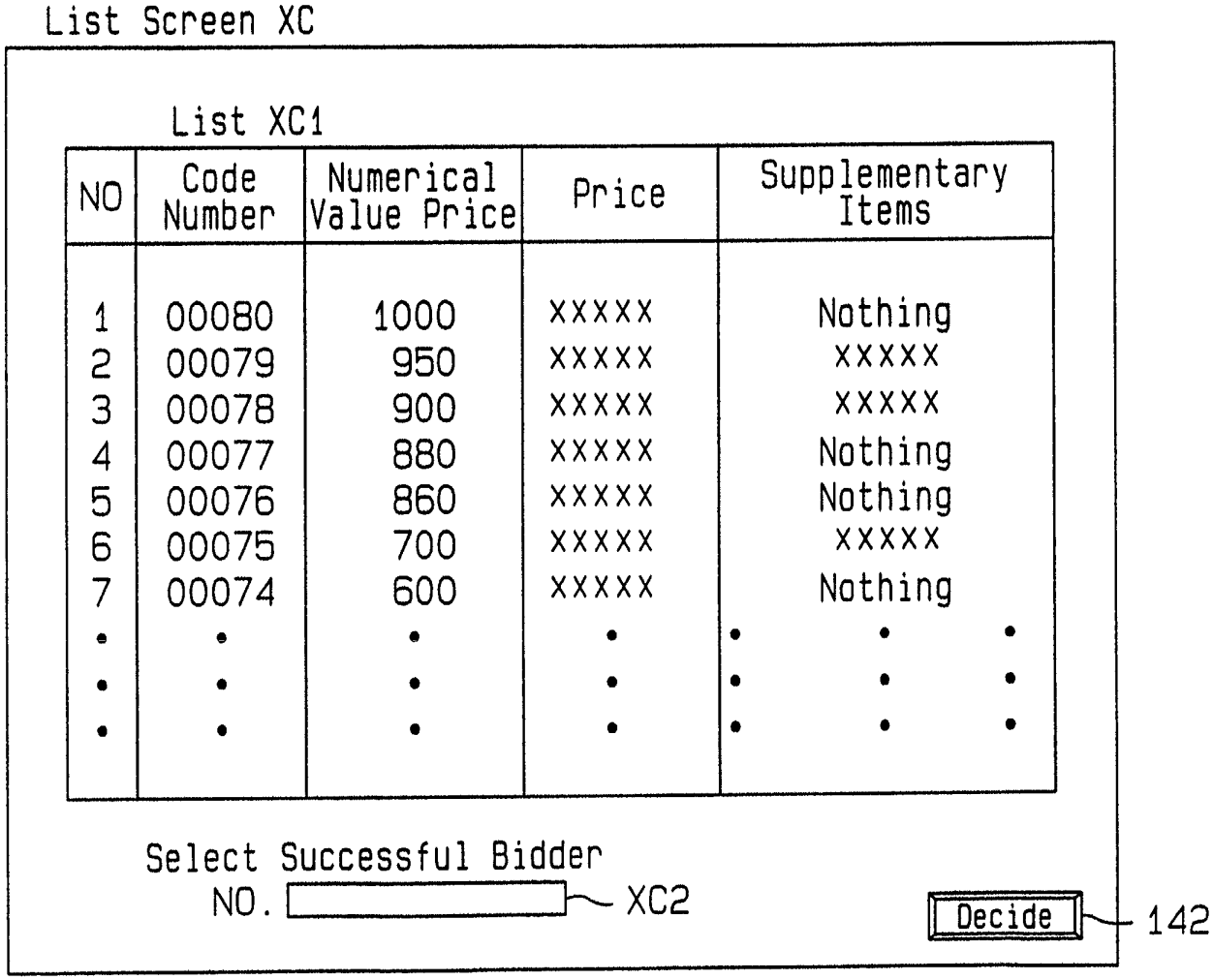

List Screen XC
List XC1
NO
Code Number
Numerical Value Price
Price
Supplementary Items
1 00080 1000 xxxxx Nothing
2 00079 950 xxxxx xxxxx
3 00078 900 xxxxx xxxxx
4 00077 880 xxxxx Nothing
5 00076 860 xxxxx Nothing
6 00075 700 xxxxx xxxxx
7 00074 600 xxxxx Nothing
Select Successful Bidder
NO.
XC2
Decide
142

Fig.44(a)

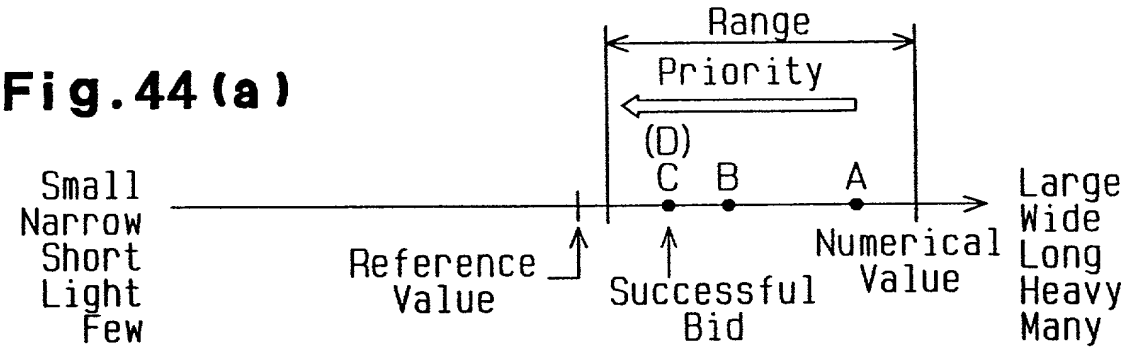


Fig.44(b)

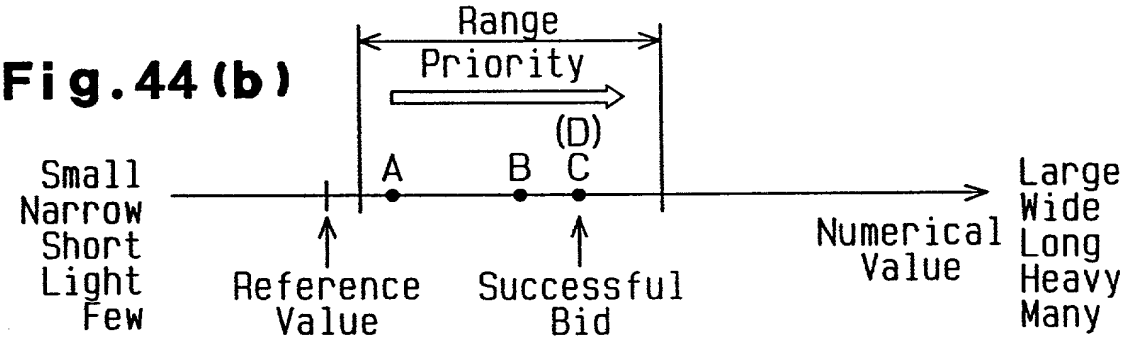


Fig.44(c)

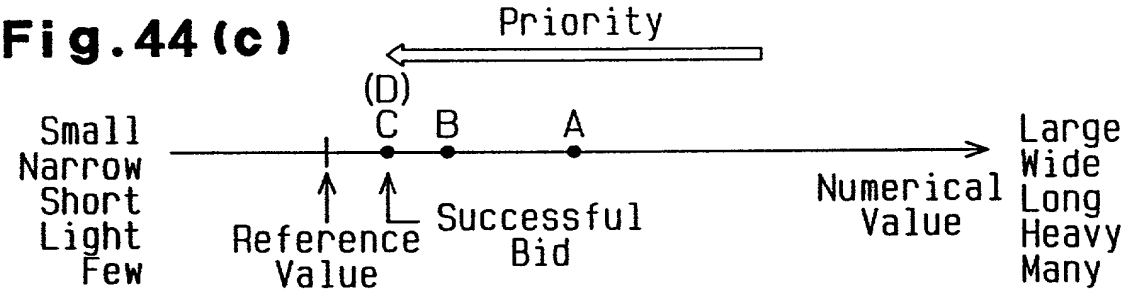


Fig.44(d)

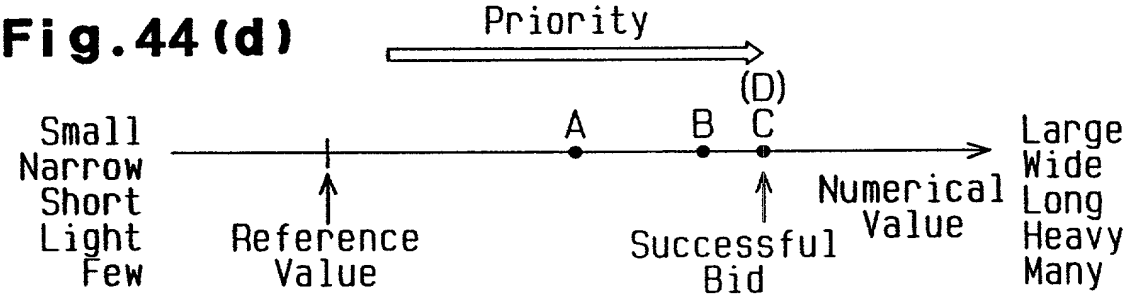


Fig.44(e)

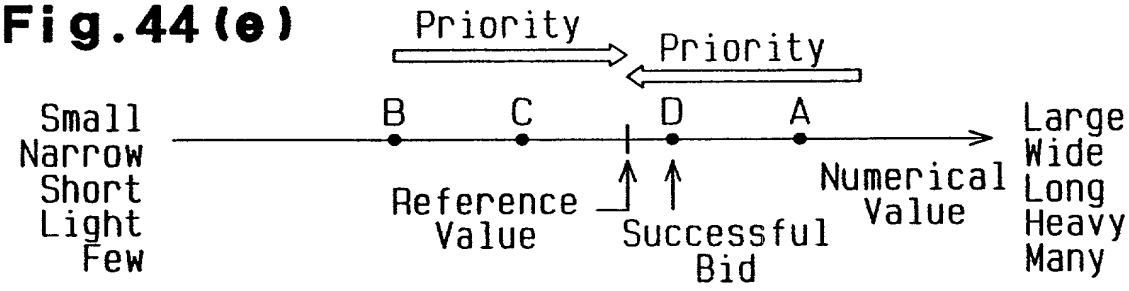


Fig.45

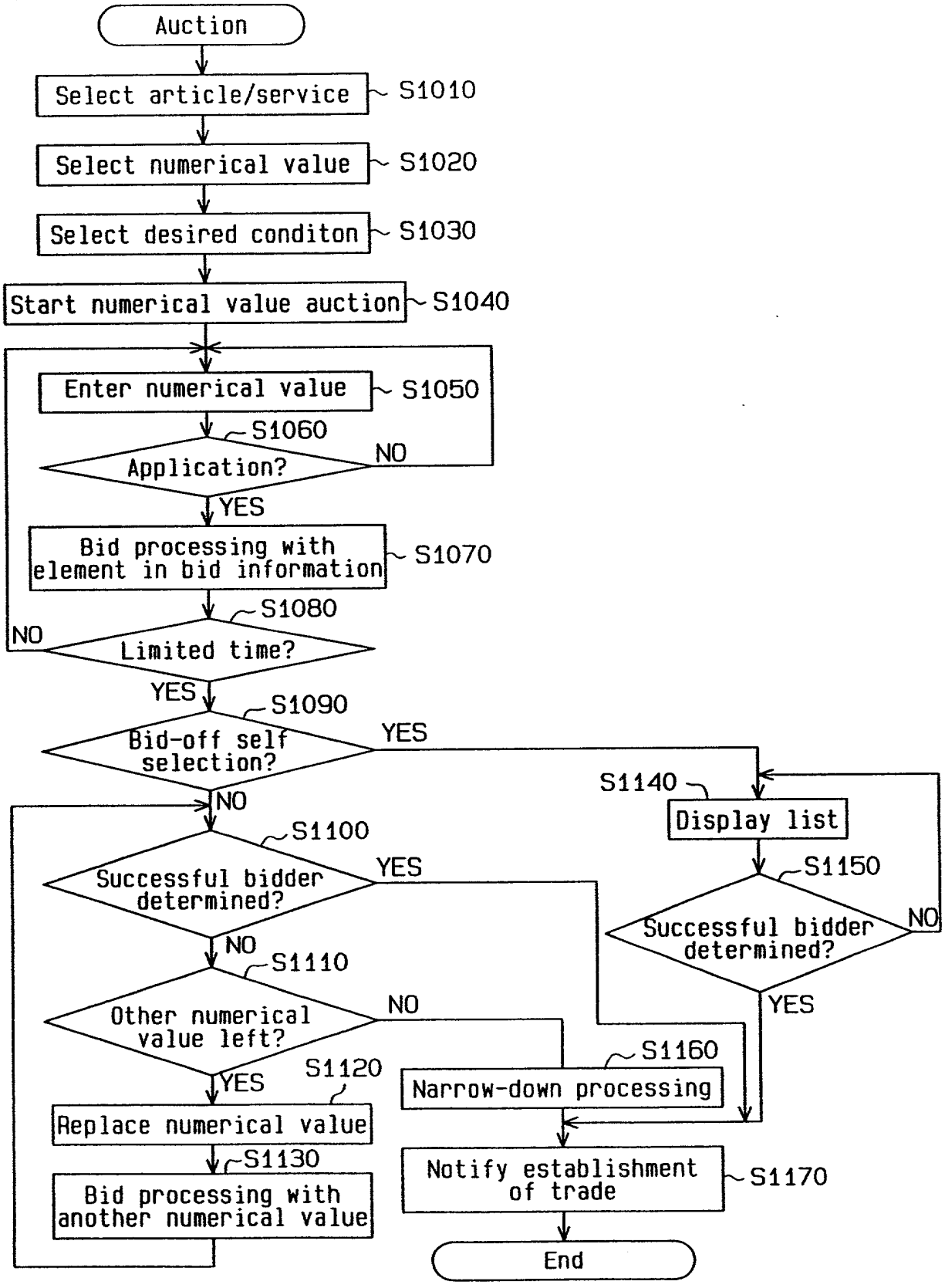

Auction
Select article/service
S1010
Select numerical value
S1020
Select desired conditon
S1030
Start numerical value auction
S1040
Enter numerical value
S1050
S1060
Application?
NO
YES
Bid processing with element in bid information
S1070
S1080
Limited time?
NO
YES
S1090
Bid-off self selection?
YES
NO
S1100
Successful bidder determined?
YES
NO
S1110
Other numerical value left?
NO
YES
S1120
Replace numerical value
S1130
Bid processing with another numerical value
S1140
Display list
S1150
Successful bidder determined?
NO
YES
S1160
Narrow-down processing
Notify establishment of trade
S1170
End

Fig.46

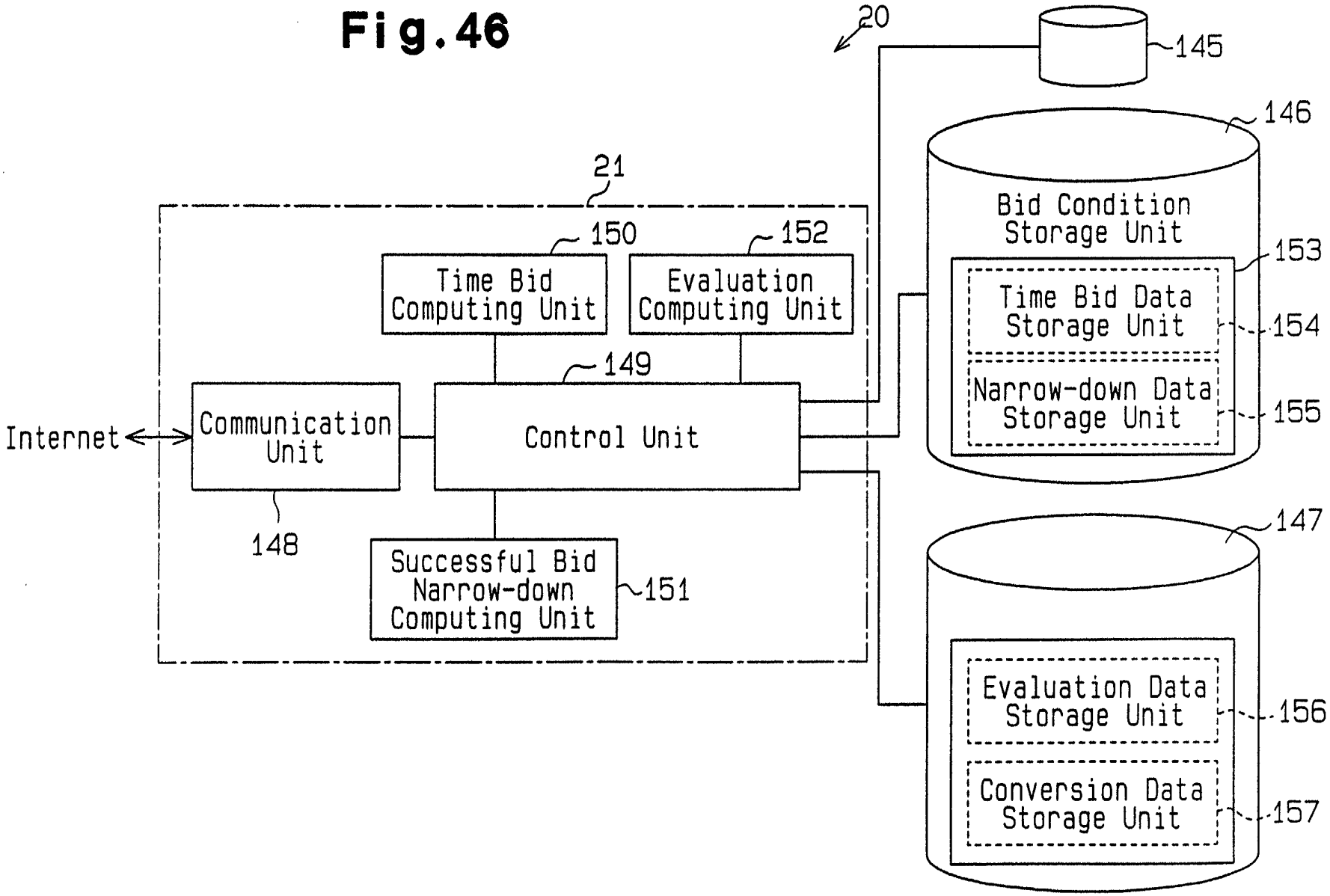

20
145
146
Bid Condition Storage Unit
153
Time Bid Data Storage Unit
154
Narrow-down Data Storage Unit
155
21
150
Time Bid Computing Unit
152
Evaluation Computing Unit
149
Internet
Communication Unit
Control Unit
148
Successful Bid Narrow-down Computing Unit
151
147
Evaluation Data Storage Unit
156
Conversion Data Storage Unit
157

Fig.47

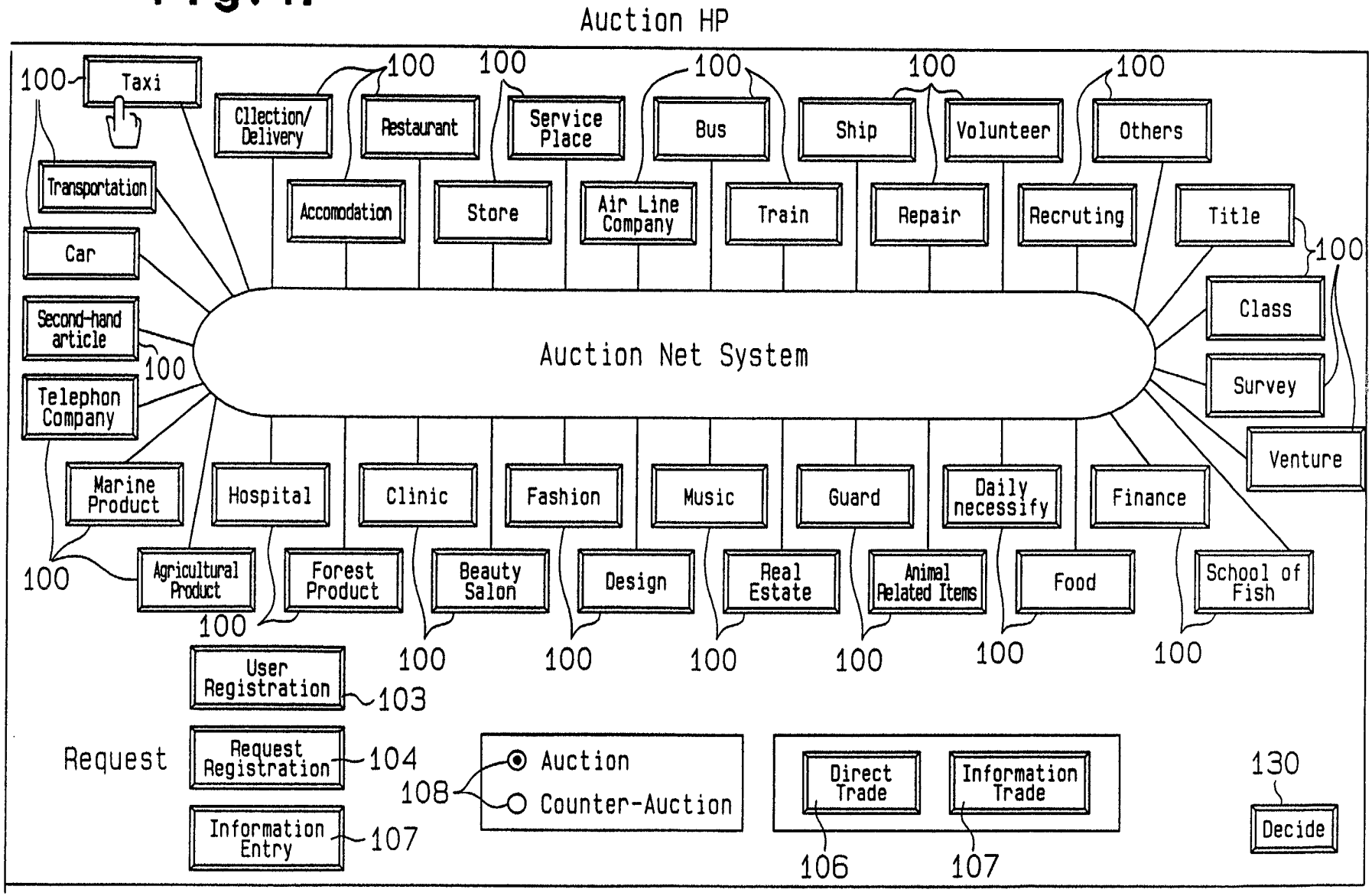

Auction HP
Taxi
Cllection/ Delivery
Restaurant
Service Place
Bus
Ship
Volunteer
Others
Transportation
Accomodation
Store
Air Line Company
Train
Repair
Recruting
Title
Car
Class
Second-hand article
Auction Net System
Survey
Telephon Company
Venture
Marine Product
Hospital
Clinic
Fashion
Music
Guard
Daily necessify
Finance
Agricultural Product
Forest Product
Beauty Salon
Design
Real Estate
Animal Related Items
Food
School of Fish
100
User Registration
103
Request
Request Registration
104
Information Entry
107
108
Auction
Counter-Auction
Direct Trade
Information Trade
106
107
130
Decide

Fig.48

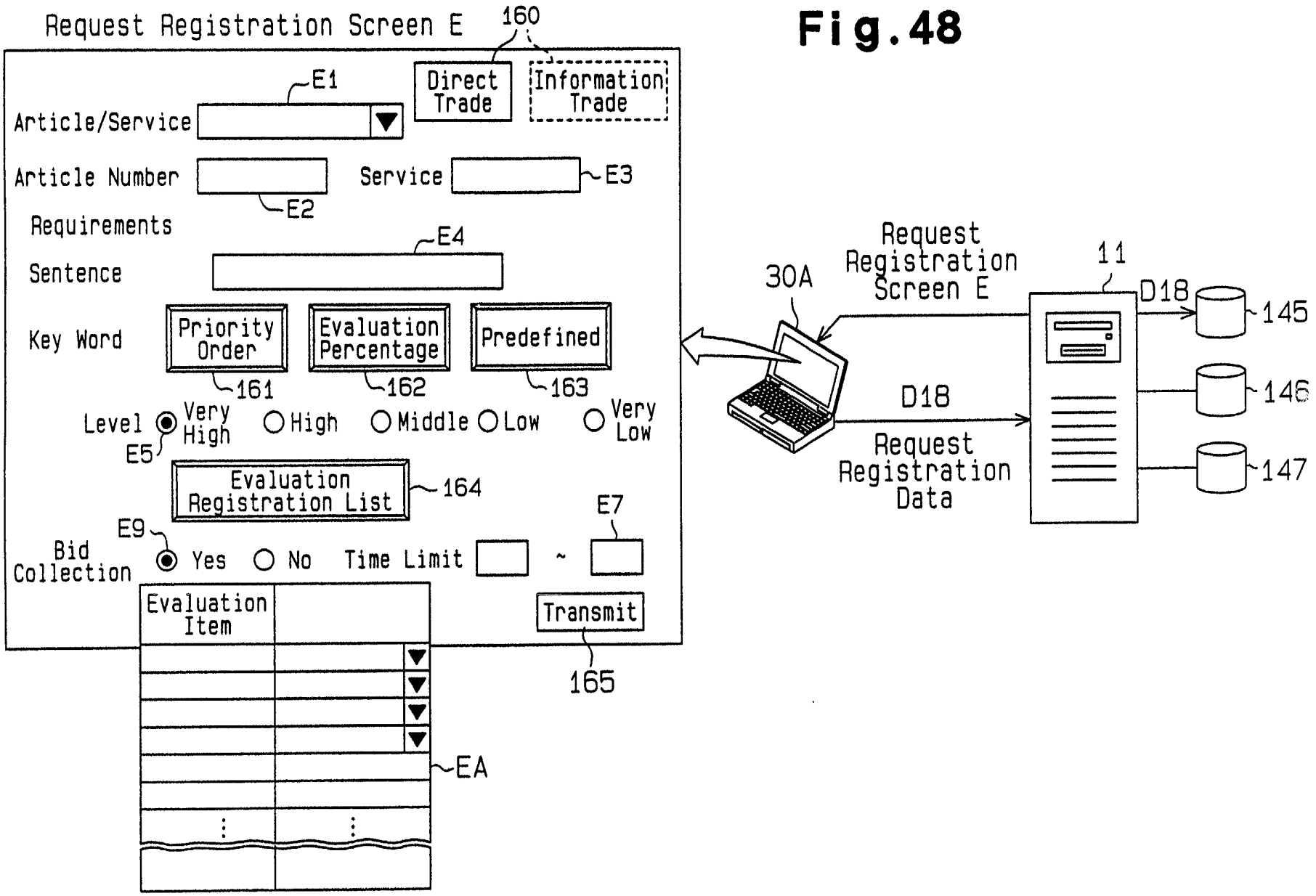

Request Registration Screen E
160
E1
Direct Trade
Information Trade
Article/Service
Article Number
E2
Service
E3
Requirements
Sentence
E4
Key Word
Priority Order
Evaluation Percentage
Predefined
161
162
163
Level
Very High
High
Middle
Low
Very Low
E5
Evaluation Registration List
164
E7
E9
Bid Collection
Yes
No
Time Limit
Transmit
165
Evaluation Item
EA
30A
Request Registration Screen E
11
D18
145
146
147
D18
Request Registration Data

Fig.49

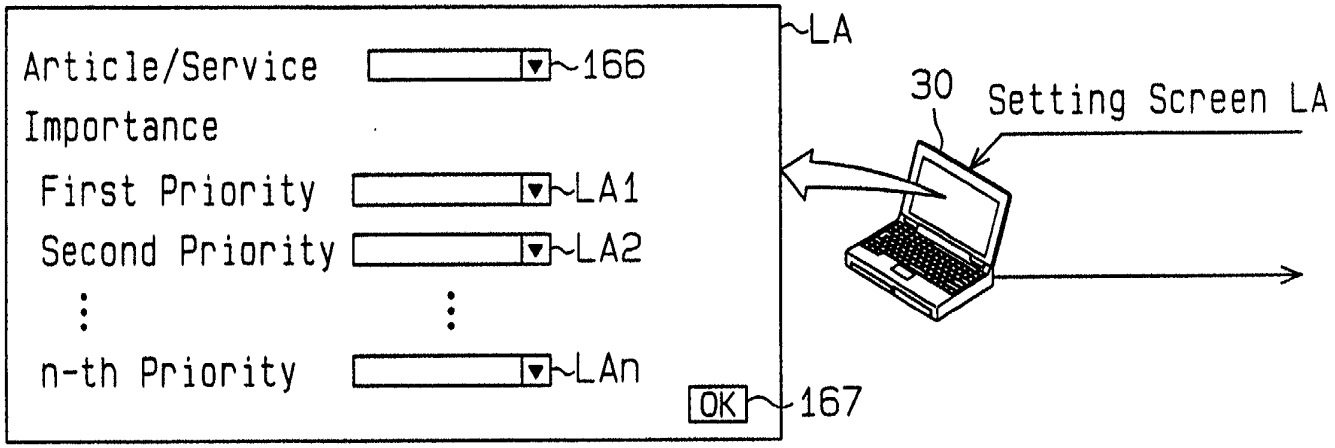

Article/Service
166
Importance
First Priority
LA1
Second Priority
LA2
n-th Priority
LAn
OK
167
LA
30
Setting Screen LA

Fig.50

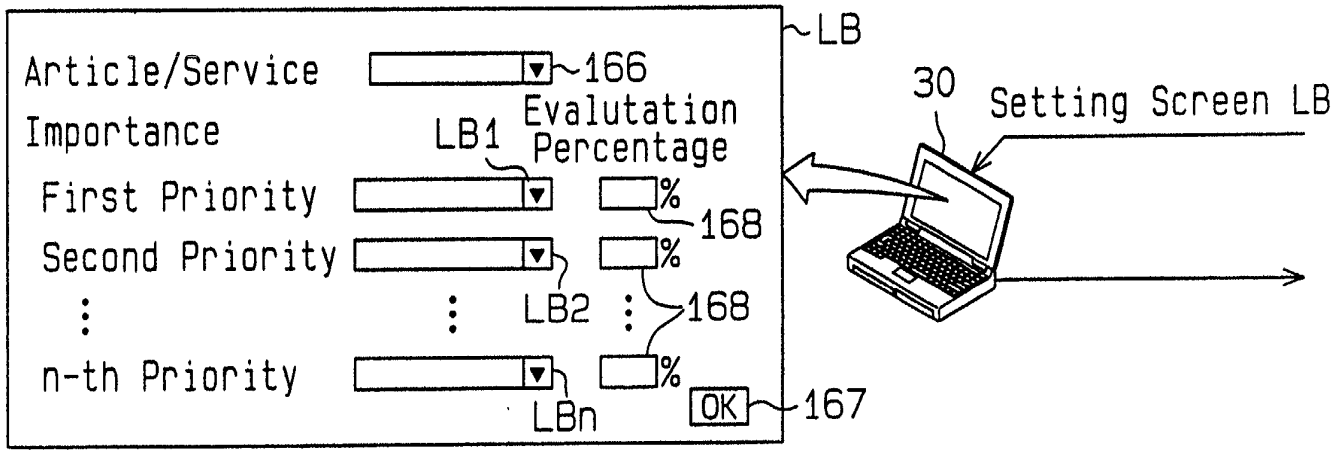

Article/Service
166
Importance
LB1
Evalutation Percentage
First Priority
%
168
Second Priority
%
LB2
168
n-th Priority
%
LBn
OK
167
LB
30
Setting Screen LB

Fig.51

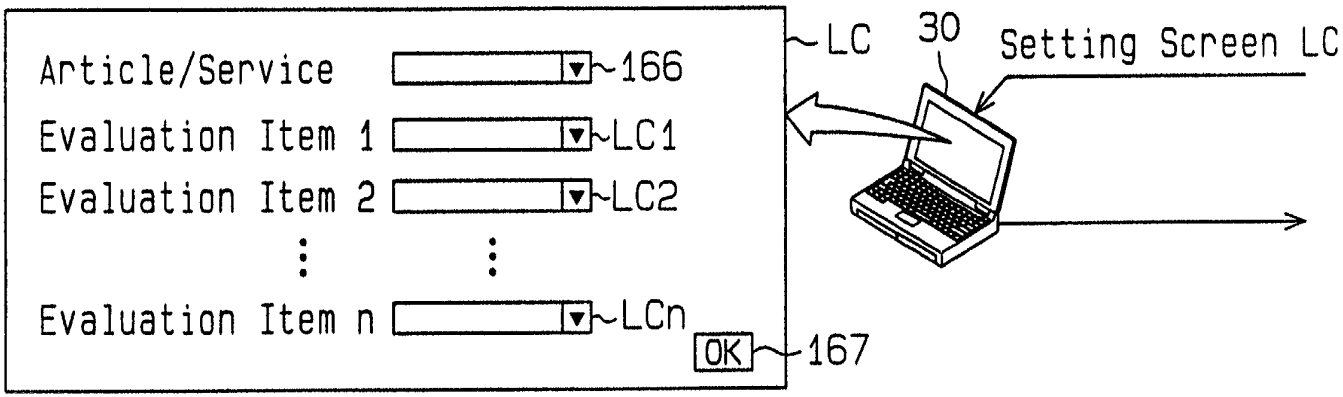

Article/Service
166
Evaluation Item 1
LC1
Evaluation Item 2
LC2
Evaluation Item n
LCn
OK
167
LC
30
Setting Screen LC

Fig.52

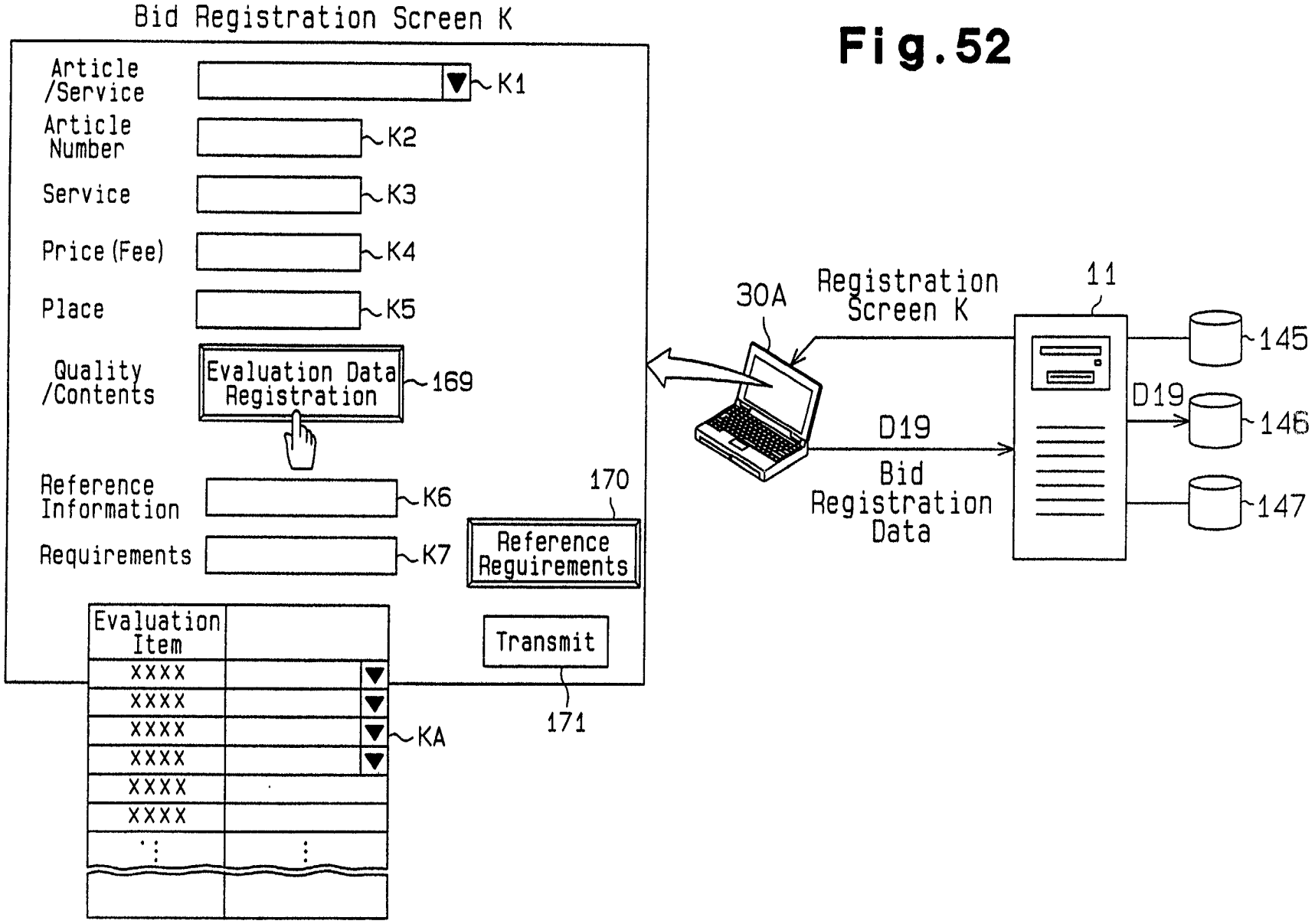

Bid Registration Screen K
Article /Service
K1
Article Number
K2
Service
K3
Price (Fee)
K4
Place
K5
Quality /Contents
Evaluation Data Registration
169
Reference Information
K6
Requirements
K7
170
Reference Requirements
Evaluation Item
XXXX
XXXX
XXXX
XXXX
XXXX
XXXX
KA
Transmit
171
30A
Registration Screen K
11
145
D19
146
D19
Bid Registration Data
147

Fig.53

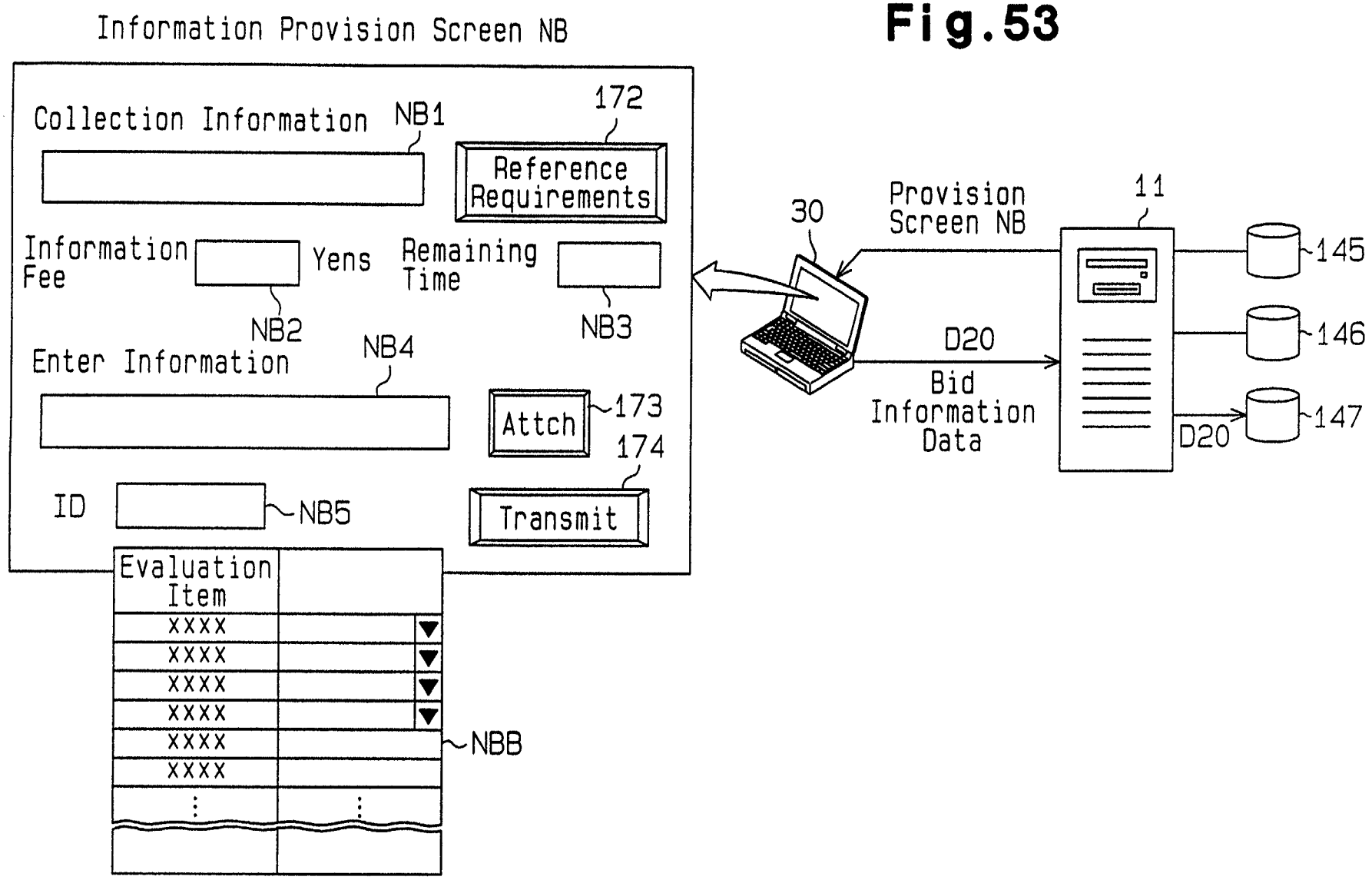

Information Provision Screen NB
Collection Information
NB1
172
Reference Requirements
Information Fee
Yens
NB2
Remaining Time
NB3
Enter Information
NB4
Attch
173
174
Transmit
ID
NB5
Evaluation Item
XXXX
XXXX
XXXX
XXXX
XXXX
XXXX
NBB
30
Provision Screen NB
11
145
146
147
D20
Bid Information Data
D20

Fig.54

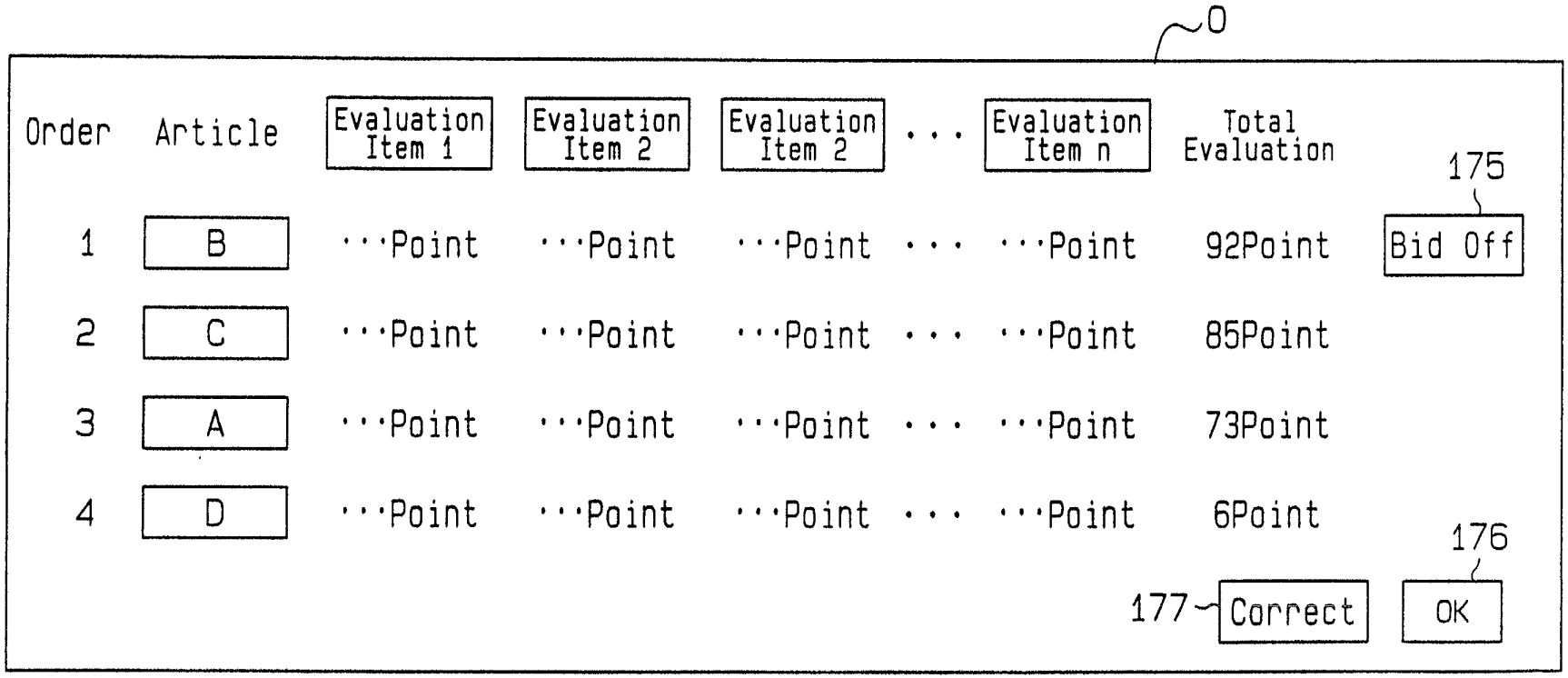

0
Order
Article
Evaluation Item 1
Evaluation Item 2
Evaluation Item 2
...
Evaluation Item n
Total Evaluation
175
1
B
···Point
···Point
···Point
···
···Point
92Point
Bid Off
2
C
···Point
···Point
···Point
···
···Point
85Point
3
A
···Point
···Point
···Point
···
···Point
73Point
4
D
···Point
···Point
···Point
···
···Point
6Point
176
177
Correct
OK

Fig.55

Article	Evaluation Item a	Evaluation Item b	Evaluation Item c	Evaluation Item x
A	90	70	65	80
B	85	72	55	64
C	75	82	70	71
D	65	85	60	65
⋮	⋮	⋮	⋮	⋮

D21

Fig.56

Key Word	Equation
Safety	Σk_n
Health	$(xk_1+yk_2)/Z+k_3$
Disease	$ak_1+bk_2+\cdots+nk_n$
⋮	⋮

D22

Fig.57

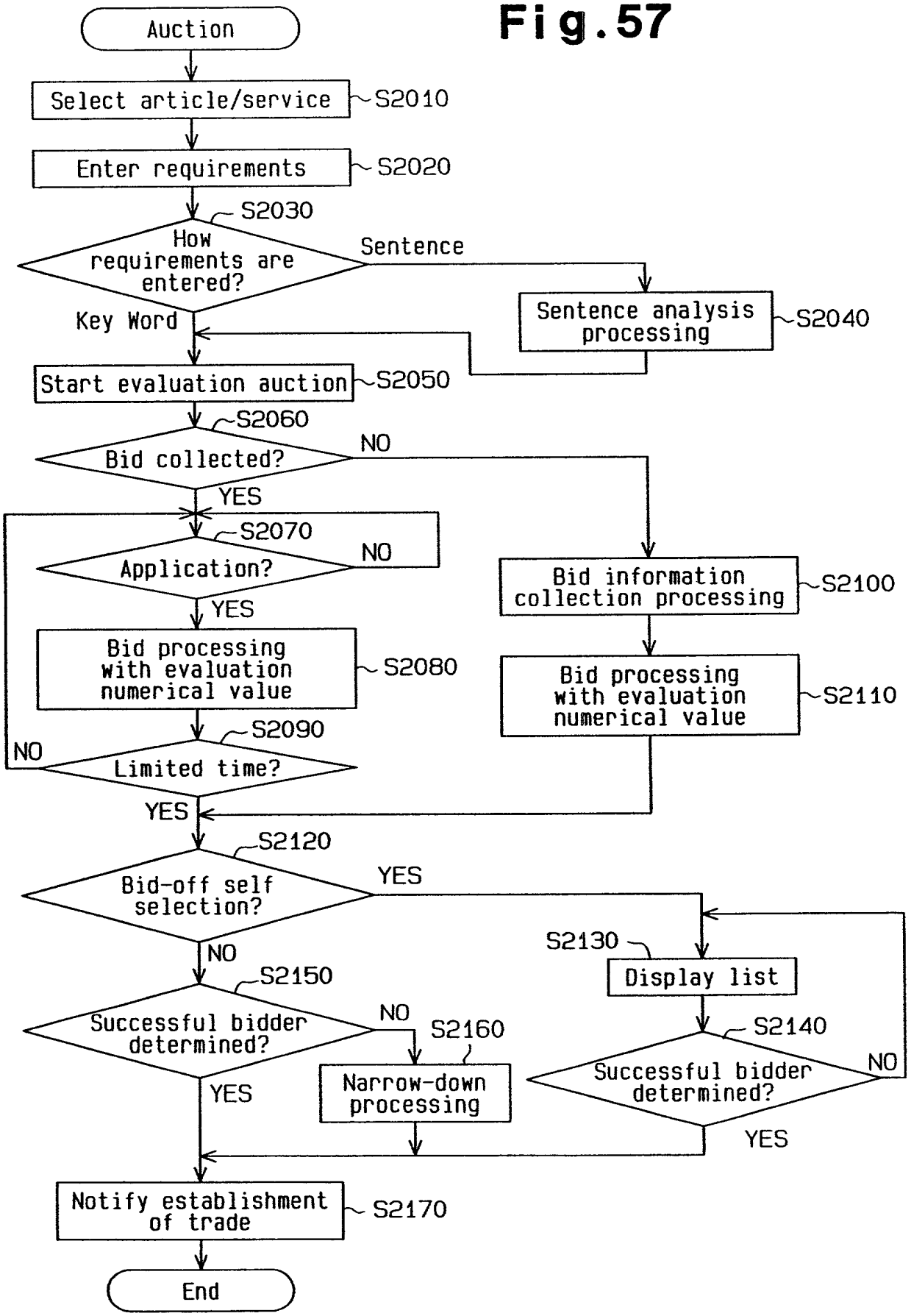

Auction
Select article/service
S2010
Enter requirements
S2020
S2030
How requirements are entered?
Sentence
Key Word
Sentence analysis processing
S2040
Start evaluation auction
S2050
S2060
Bid collected?
NO
YES
S2070
Application?
NO
YES
Bid processing with evaluation numerical value
S2080
S2090
Limited time?
NO
YES
Bid information collection processing
S2100
Bid processing with evaluation numerical value
S2110
S2120
Bid-off self selection?
YES
NO
S2130
Display list
S2140
Successful bidder determined?
NO
YES
S2150
Successful bidder determined?
NO
S2160
Narrow-down processing
YES
Notify establishment of trade
S2170
End

Fig.58

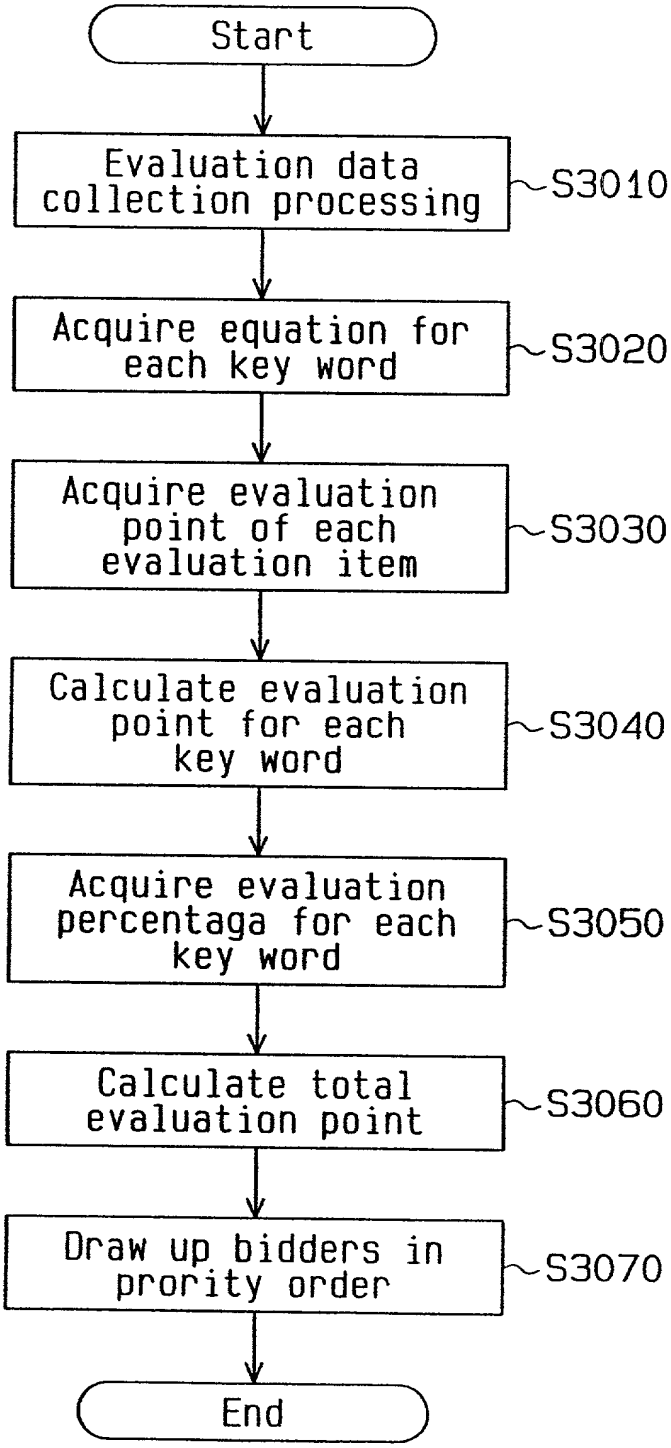

Start
Evaluation data collection processing
S3010
Acquire equation for each key word
S3020
Acquire evaluation point of each evaluation item
S3030
Calculate evaluation point for each key word
S3040
Acquire evaluation percentaga for each key word
S3050
Calculate total evaluation point
S3060
Draw up bidders in prority order
S3070
End

Fig.59

Element Selection Screen JA

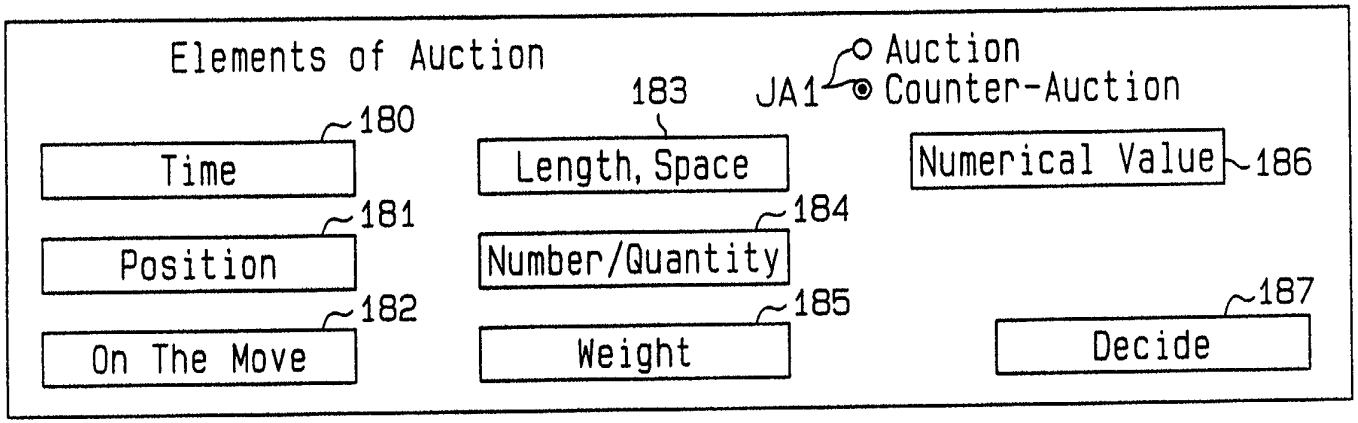


Fig.60

Bid Form Selection Screen IA

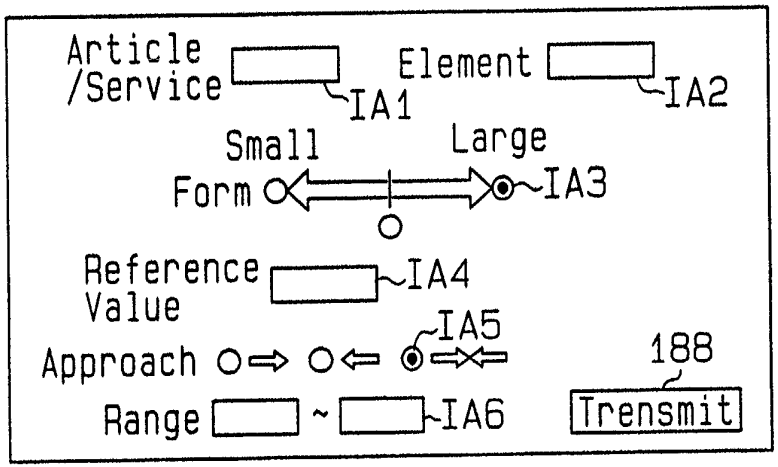


Fig.61

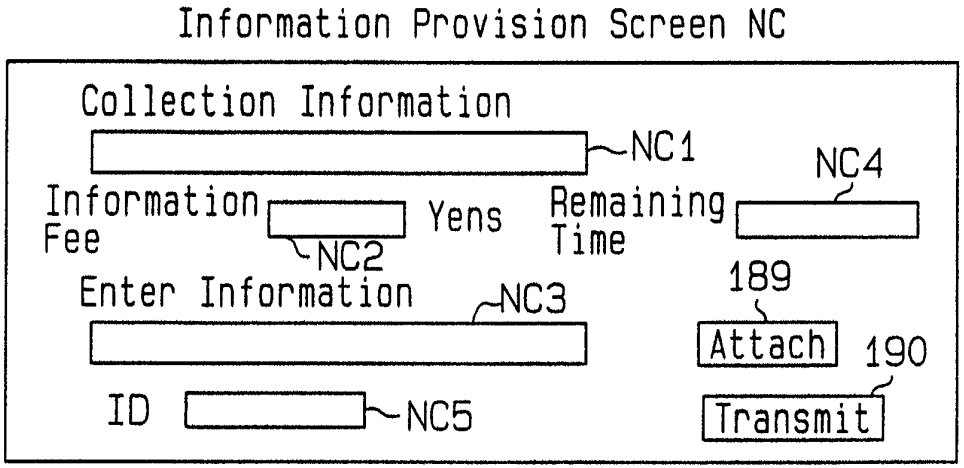

Information Provision Screen NC
Collection Information
NC1
NC4
Information Fee
Yens
NC2
Remaining Time
189
Enter Information
NC3
Attach
190
ID
NC5
Transmit

Fig.62(a)

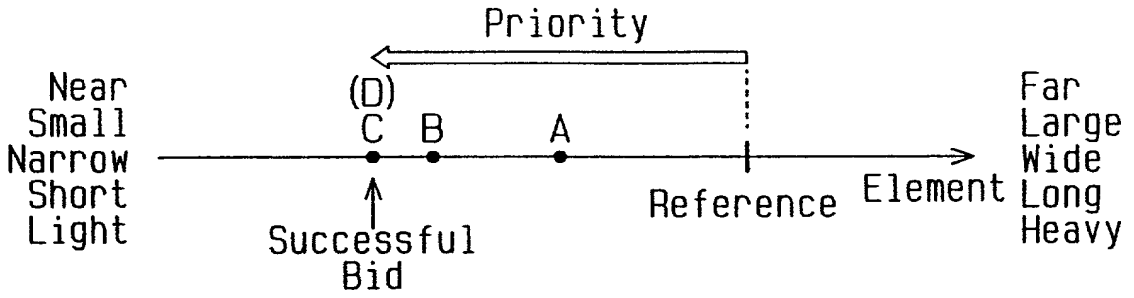


Fig.62(b)

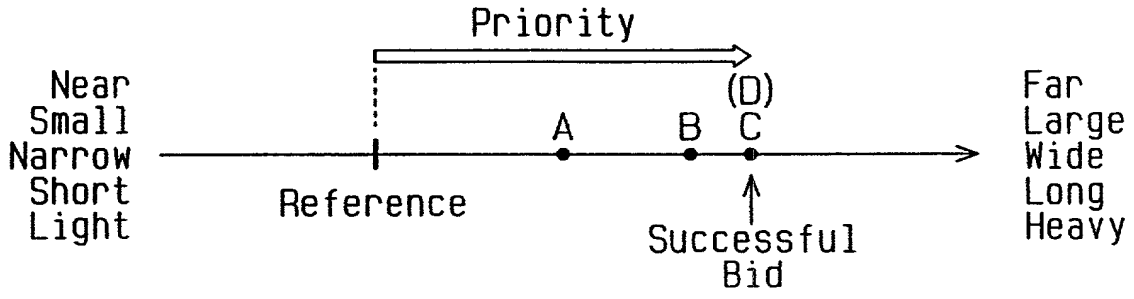


Fig.62(c)

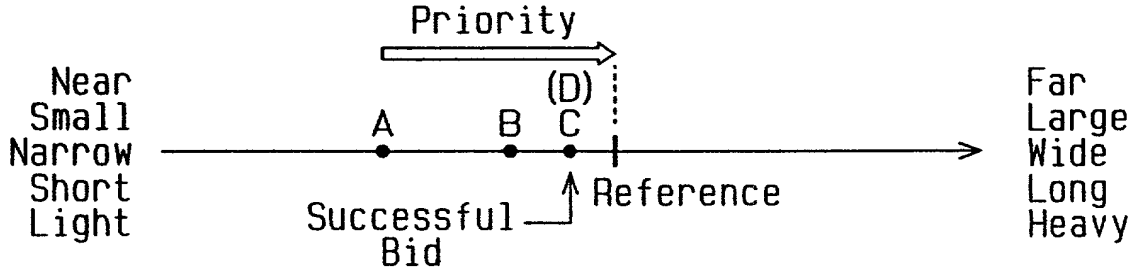


Fig.62(d)

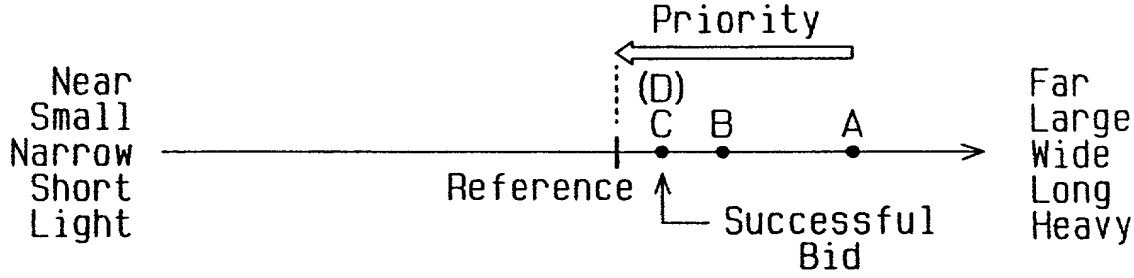


Fig.63

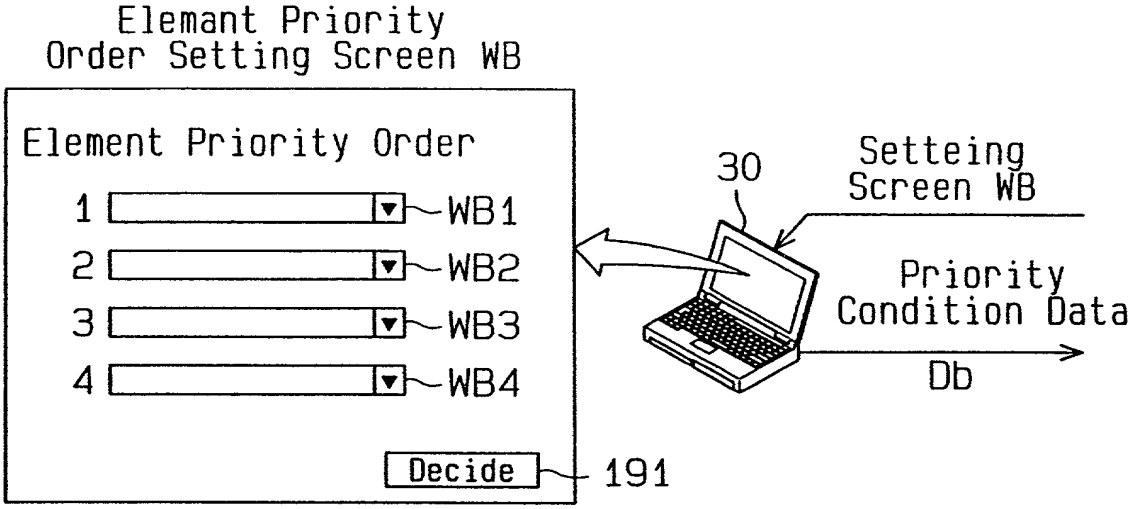


Fig.64

List Screen XD

List XD1

NO	Code Number	Bid Information				
		Element 1	Element 2			
1	00080	XXXXX	XXXXX	XX	XXXX	XX
2	00079	XXXXX	XXXXX	XX	XXXX	XX
3	00078	XXXXX	XXXXX	XX	XXXX	XX
4	00077	XXXXX	XXXXX	XX	XXXX	XX
5	00076	XXXXX	XXXXX	XX	XXXX	XX
6	00075	XXXXX	XXXXX	XX	XXXX	XX
7	00074	XXXXX	XXXXX	XX	XXXX	XX
•	•	•	•	•	•	•
•	•	•	•	•	•	•
•	•	•	•	•	•	•

Select Successfurl Bidder
NO. XD2

Decide 192

Fig.65

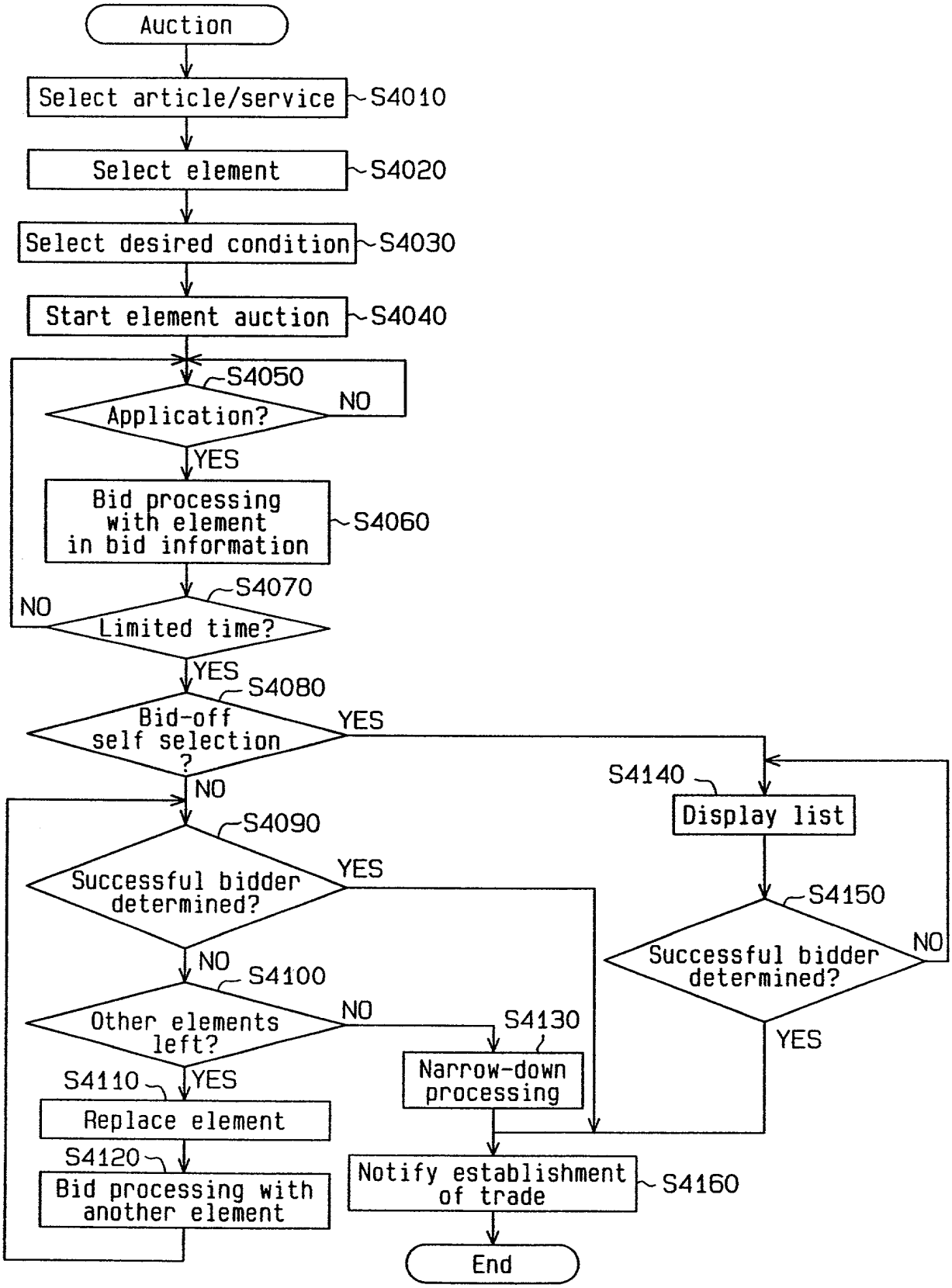
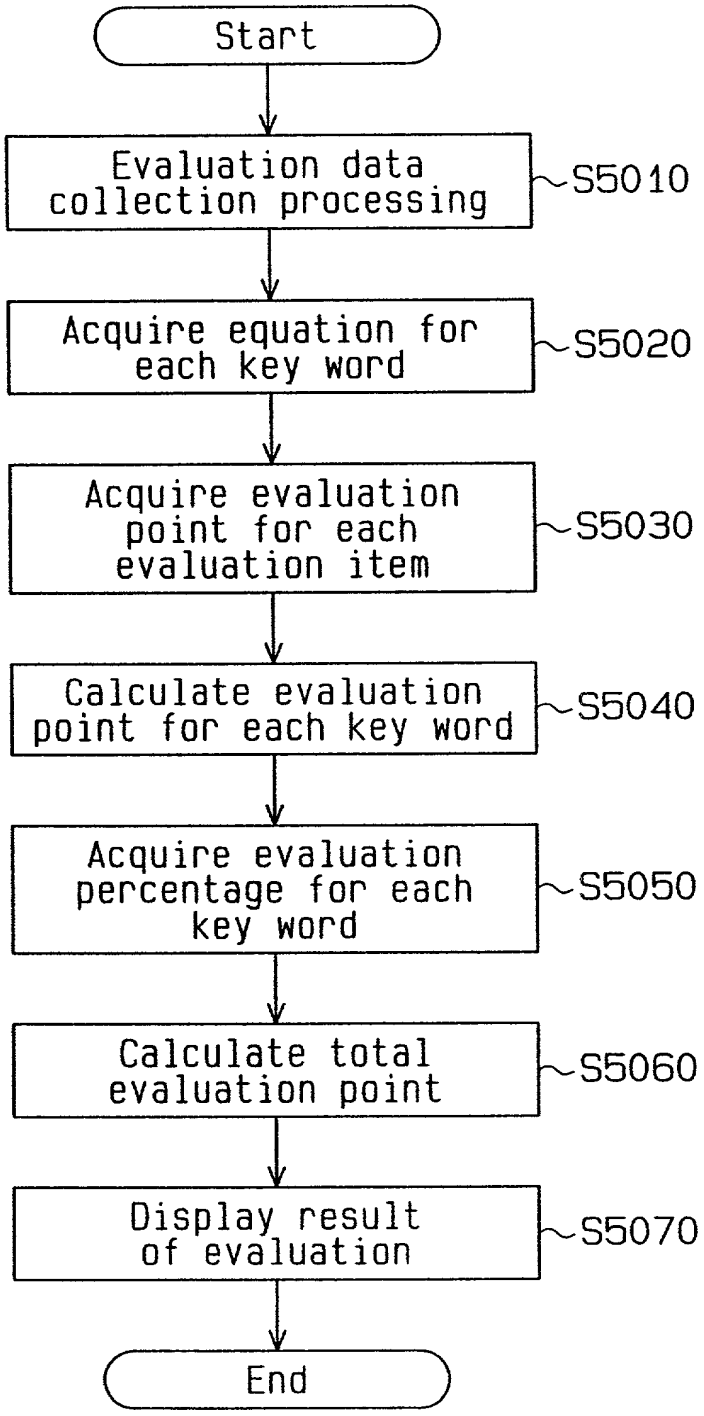

Auction
Select article/service
S4010
Select element
S4020
Select desired condition
S4030
Start element auction
S4040
S4050
Application?
NO
YES
Bid processing with element in bid information
S4060
S4070
NO
Limited time?
YES
S4080
Bid-off self selection ?
YES
NO
S4090
Successful bidder determined?
YES
NO
S4100
Other elements left?
NO
S4130
Narrow-down processing
S4110
YES
Replace element
S4120
Bid processing with another element
S4140
Display list
S4150
Successful bidder determined?
NO
YES
Notify establishment of trade
S4160
End

Fig.66


Start
Evaluation data collection processing
S5010
Acquire equation for each key word
S5020
Acquire evaluation point for each evaluation item
S5030
Calculate evaluation point for each key word
S5040
Acquire evaluation percentage for each key word
S5050
Calculate total evaluation point
S5060
Display result of evaluation
S5070
End

FOREIGN PUBLISHED

Fig.67

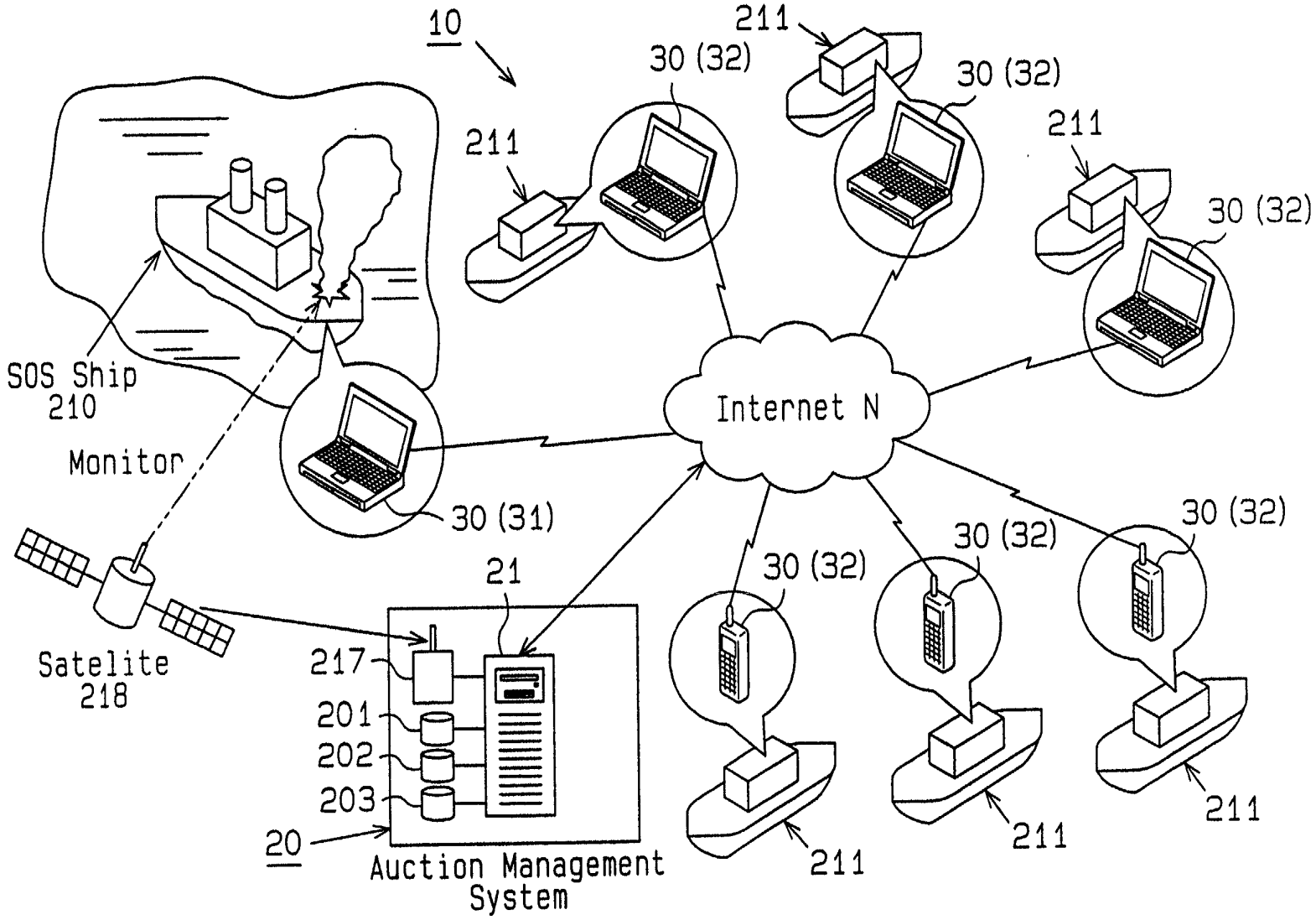


Fig.68

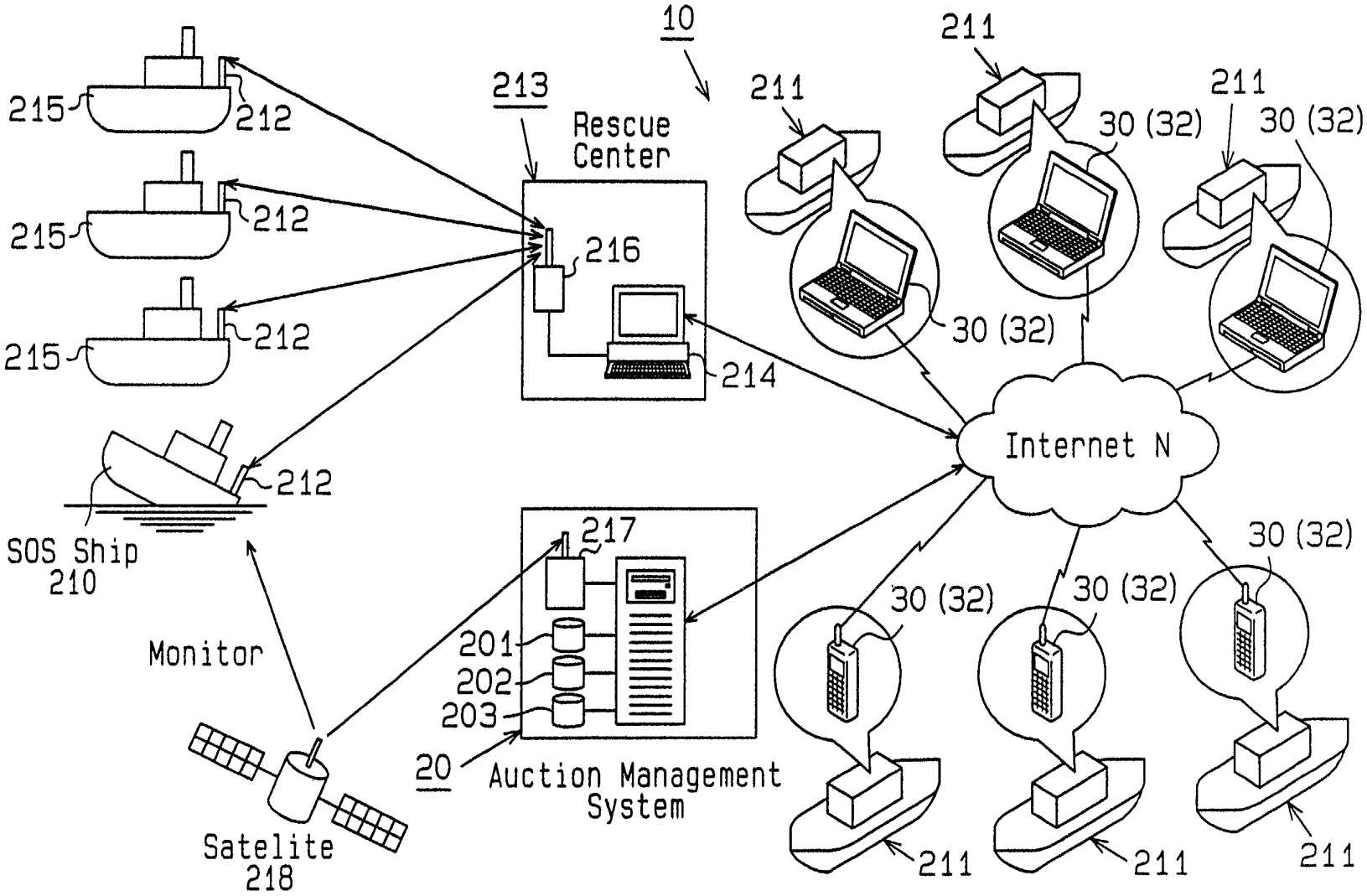

10
213
Rescue Center
216
214
215
212
215
212
215
212
212
SOS Ship 210
Monitor
Satelite 218
217
201
202
203
20
Auction Management System
Internet N
211
211
211
30 (32)
30 (32)
30 (32)
30 (32)
30 (32)
30 (32)
211
211
211

Fig.69

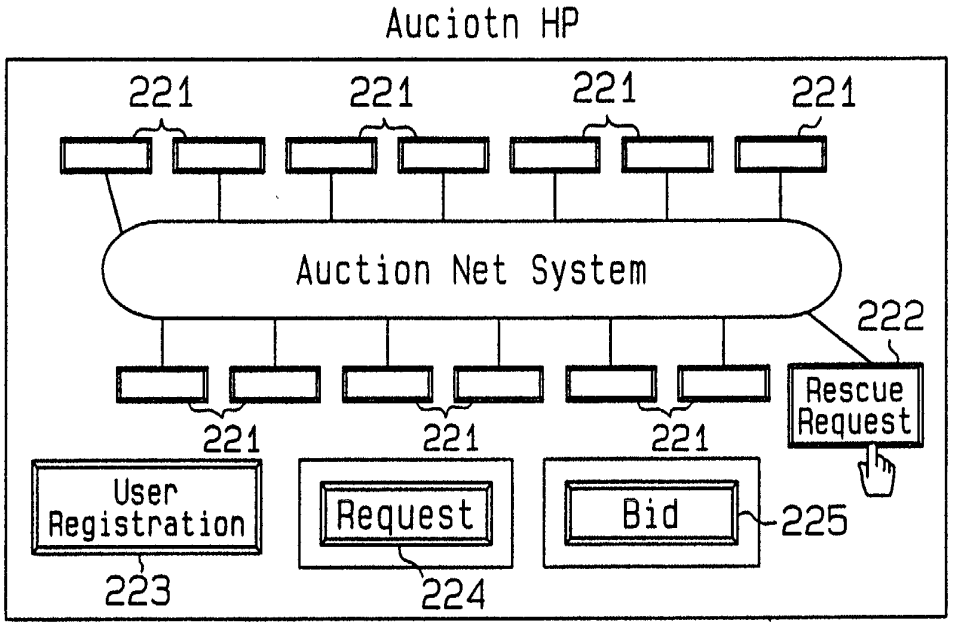
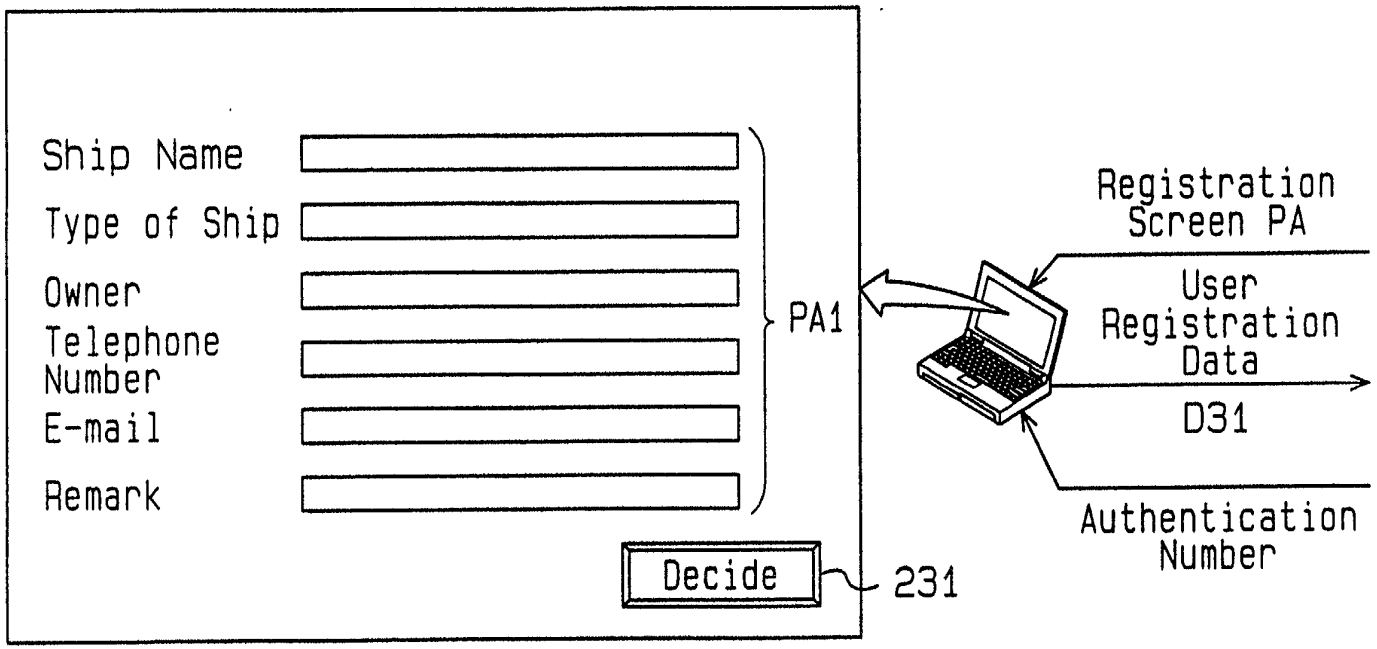
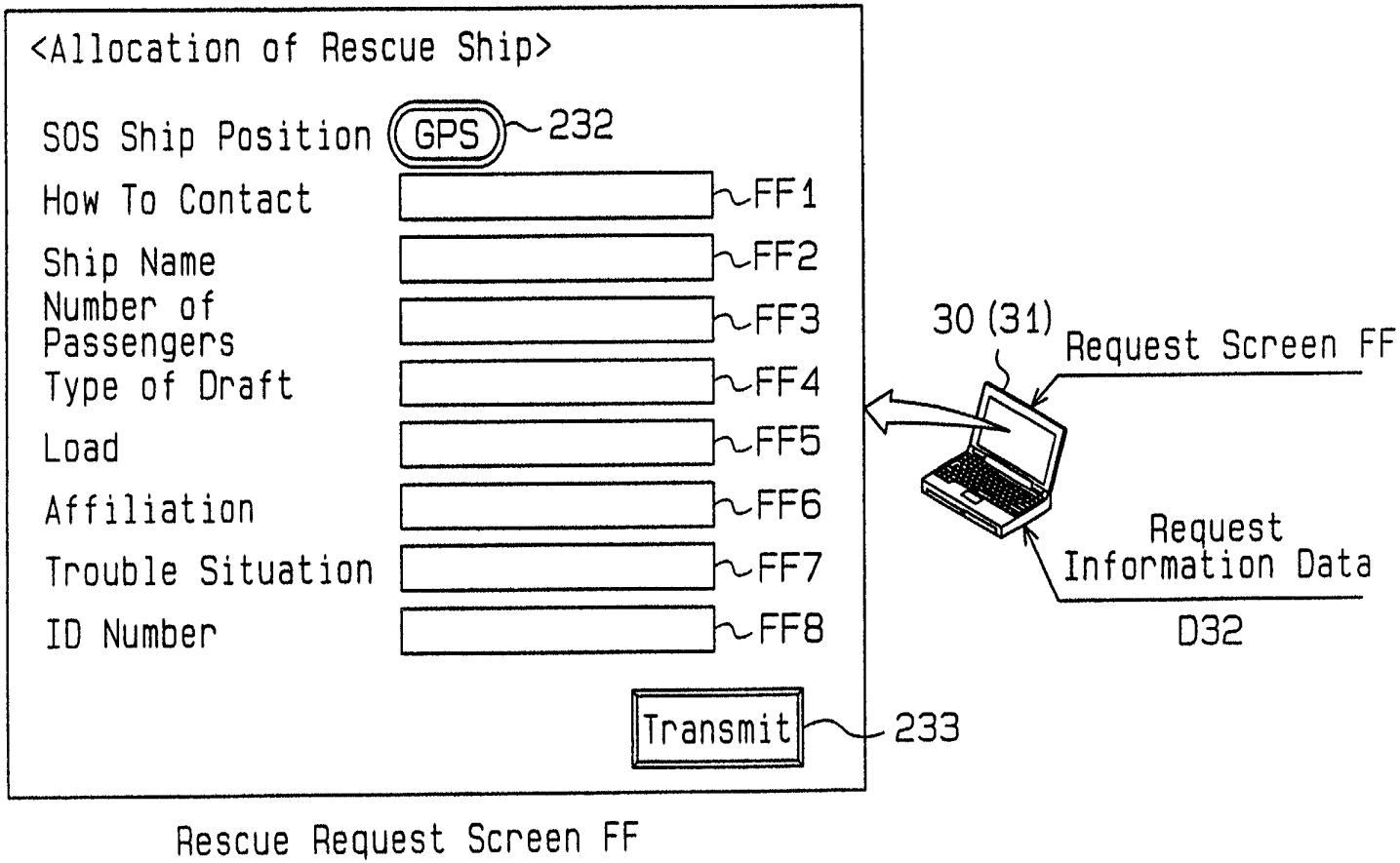

Auciotn HP
221
221
221
221
Auction Net System
222
Rescue Request
221
221
221
User Registration
Request
Bid
225
223
224

Fig.70



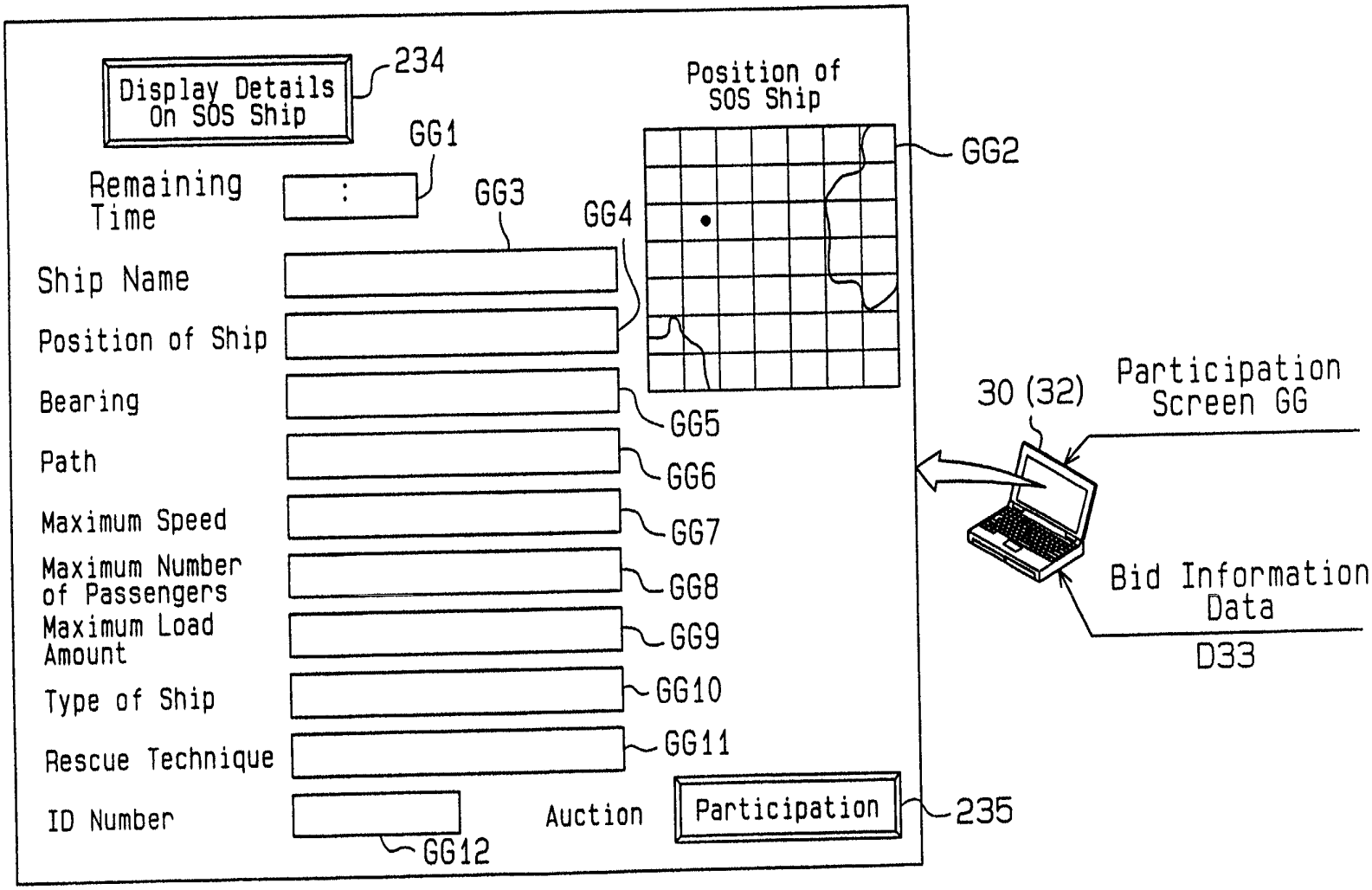
User Registration Screen PA

Fig.71



Rescue Request Screen FF

Fig.72



Auction Participation Screen GG

Fig.73(a)

	Available Time (minutes)	Size of Ship (t)	Number Of Persons To Be Saved (persons)	Required Rescue Technical Level
SOS Ship	60	3000	50	70

Fig.73(b)

Participant Ship	Arrival Time (minutes)	Size of Ship (t)	Number of Persons Who Can Be Saved (persons)	Rescue Technical Level
X	10	500	4	20
Y	15	5000	200	80
Z	30	4000	100	60
•	•	•	•	•
•	•	•	•	•
•	•	•	•	•

Fig.74

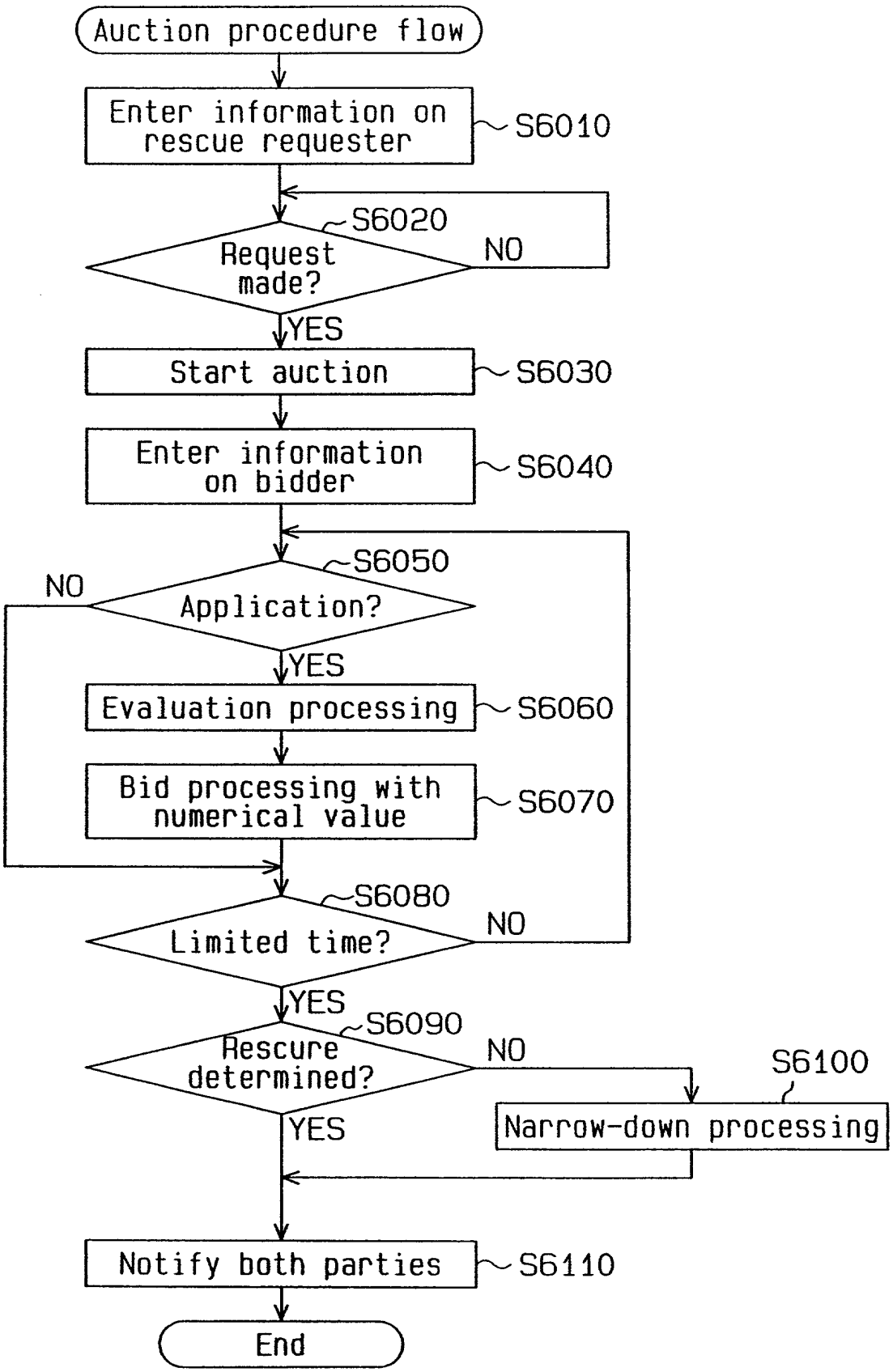

Auction procedure flow
Enter information on rescue requester
S6010
S6020
Request made?
NO
YES
Start auction
S6030
Enter information on bidder
S6040
S6050
Application?
NO
YES
Evaluation processing
S6060
Bid processing with numerical value
S6070
S6080
Limited time?
NO
YES
S6090
Rescure determined?
NO
YES
S6100
Narrow-down processing
Notify both parties
S6110
End

Fig.75

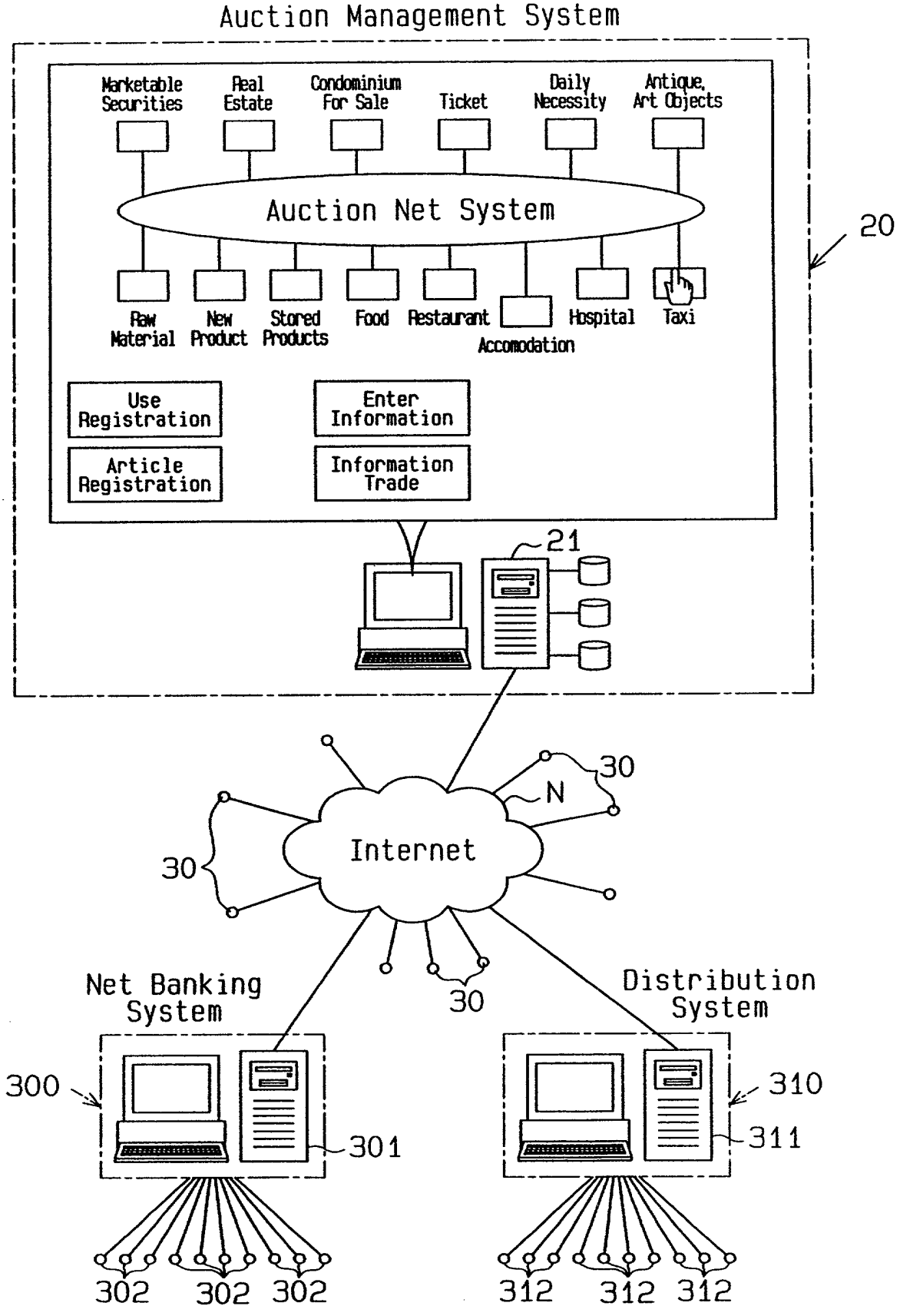

Auction Management System
Marketable Securities
Real Estate
Condominium For Sale
Ticket
Daily Necessity
Antique, Art Objects
Auction Net System
20
Raw Material
New Product
Stored Products
Food
Restaurant
Accomodation
Hospital
Taxi
Use Registration
Article Registration
Enter Information
Information Trade
21
30
N
Internet
30
30
Net Banking System
Distribution System
300
301
310
311
302
302
302
312
312
312

Fig.76(a)

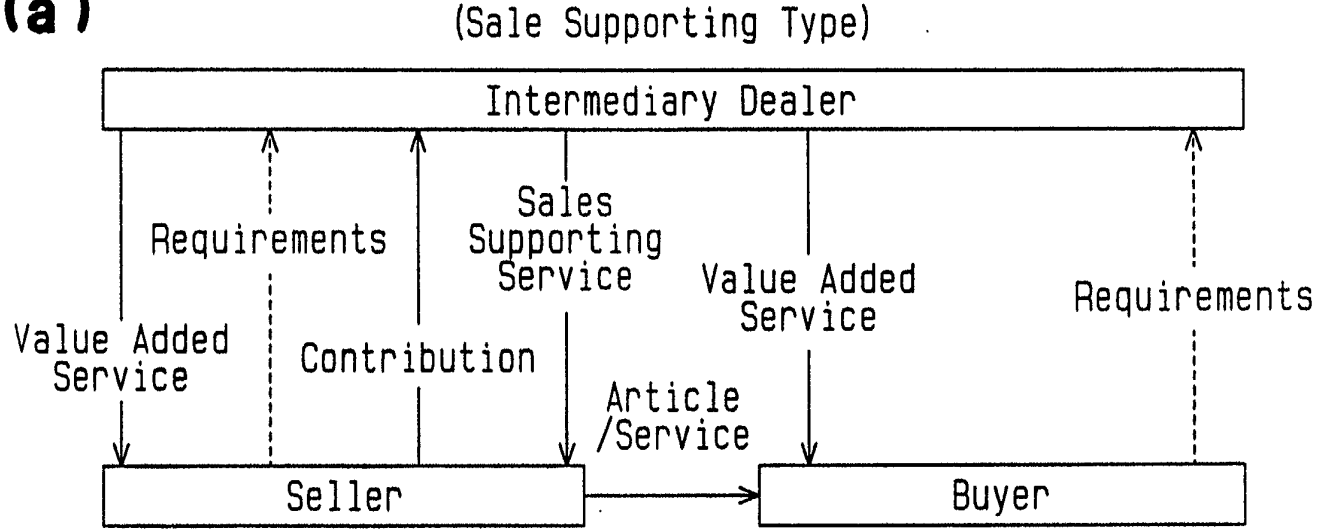


Fig.76(b)

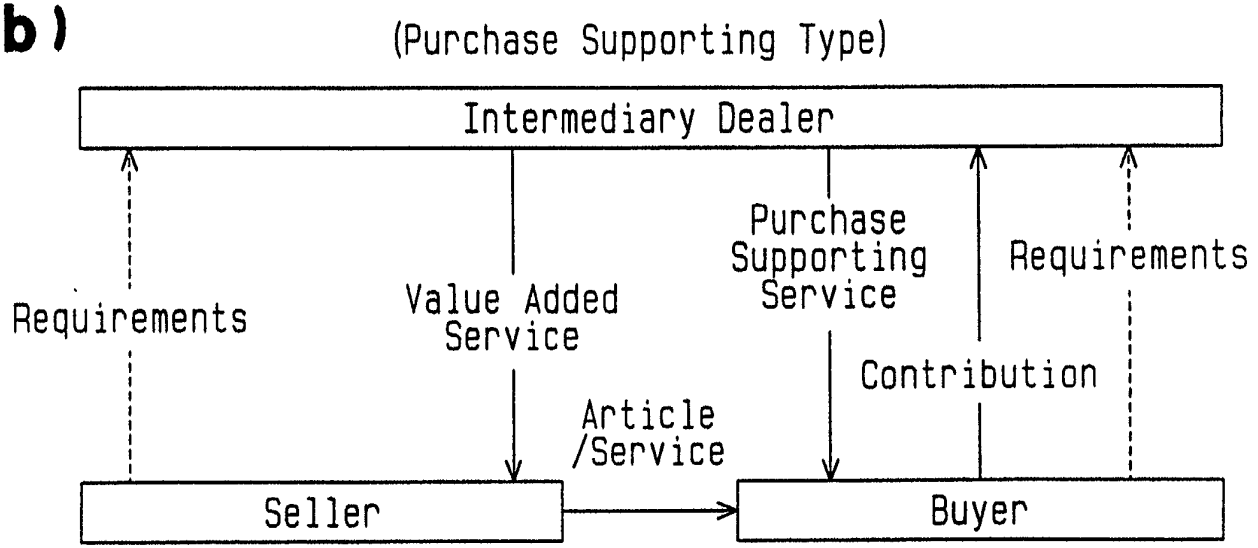
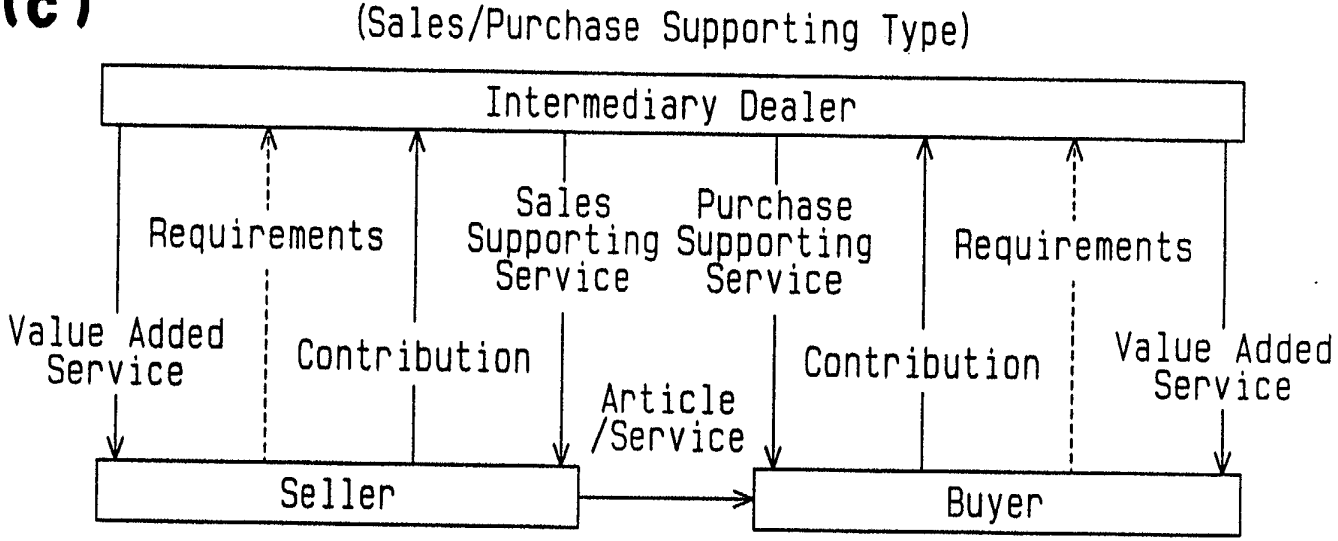


Fig.76(c)


(Sales/Purchase Supporting Type)
Intermediary Dealer
Requirements
Sales Supporting Service
Purchase Supporting Service
Requirements
Value Added Service
Contribution
Article /Service
Contribution
Value Added Service
Seller
Buyer